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A SURVEY OF VISUAL AIDS IN SCHOOLS AND CLASSES FOR THE DEAF IN THE UNITED STATES.

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INFORMATION CONCERNING VISUAL PRESENTATION DEVICES, THEIR USE IN THE EDUCATION OF THE DEAF, AND THEIR SPECIAL PROBLEMS WERE SURVEYED. QUESTIONNAIRES WERE SENT TO ALL SCHOOLS AND CLASSES FOR THE DEAF IN THE UNITED STATES DURING THE FALL SEMESTER OF 1961-62. THE RESPONSE WAS 55.9 PERCENT OF THE QUESTIONNAIRES MAILED. INTERVIEWS WERE HELD WITH A NUMBER OF SUPERINTENDENTS AND OTHER ADMINISTRATORS. PROGRAMS WERE RATED AND RESPONSES CODED TO ASSESS AND VALIDATE THE DATA RECEIVED. THE DATA REPRESENTED 73 PERCENT OF THE ENROLLED DEAF STUDENTS. THE SCHOOLS AND CLASSES WERE FOUND TO HAVE ADEQUATE FACILITIES AND FEW COMPLAINTS ON BUDGETS. VISUAL AID MATERIALS WERE SHOWN TO BE A PROBLEM AND SOMEWHAT SCARCE. ALSO, TEACHER TRAINING DESERVED CONSIDERATION FOR INSTRUCTION ON USE OF VISUAL AIDS. SUGGESTED APPROACHES TO THESE PROBLEMS ARE THAT WORKSHOPS BE PLANNED AND SUPPORT FOR BETTER MATERIALS BE REQUESTED. (RS)

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FOR THE DEAF
IN THE UNITED STATES

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Washington, D.C.

October, 1962

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October 30, 1962.

Introduction

So eminent is vision in the sense hierarchy of the deaf child that all means to enhance his instruction through this modality might be expected to have reached a high state of development in the schools and classes for the deaf. Motion pictures, television, and projection devices of all sorts have been designed to optimize visual presentation. How extensively are they used in the education of the deaf? What special problems must be met when using these devices in the instruction of deaf children? What factors inherent in or related to visual aids impede or promote their use with this group? This survey was designed to provide information about these and similar questions.

Initially, all schools and classes for the deaf in the United States were sent a questionnaire. Following this mail survey, school superintendents were interviewed personally and, in some cases, by mail.[1] The data thus derived were then coded and processed by electronic computer to form the basis of this report.

Since the source of the data is indicated in each table, routine reference will not be made in the discussion to follow as to whether the information was obtained from the mail questionnaire or the personal interviews. In the same vein, the modifying clause "for the deaf" will not be used in referring to the schools and classes covered by this survey, unless these schools are being compared to the schools for the hearing.

Certain terms used in this study need to be defined here. In some cases, these terms have a multiplicity of meanings which would not permit the clarity of expression desired in this report. In other cases, the terms are being used here in an idiosyncratic way. For these reasons, the following definitions are presented:

Schools for the deaf. This term refers to an institution devoted entirely to the education of the deaf and housed in a separate building or buildings.

Classes for the deaf. This term refers to a class or classes for the deaf housed in a larger structure also containing classes for children who are not hearing impaired.

Deaf. The word "deaf" is used to indicate a loss of auditory acuity so great as to obviate normal educational procedures. It is intended to be consistent with the definition given by the Conference of Executives of American Schools for the Deaf: the deaf are "those in whom the sense of hearing is non-functional for the ordinary purposes of life".

Visual aid equipment. This term refers to those mechanical devices which are used to project images (either statically or in motion), television receivers, and devices for the presentation of programmed instructional materials.

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[1] The authors are grateful to Mr. John Gough for conducting some of these interviews.

Not included under this definition are such well-established instructional aids as blackboards, mounted pictures, flash cards, etc.

Visual aid materials. This term refers to those materials which are used in visual aid equipment; e.g., motion pictures, slides, filmstrips, etc.

Visual aids. When used without the addition of the words "equipment" or "material", this term refers collectively to both visual aid equipment and materials.

The discussion which follows has been divided into seven sections, followed by conclusions and an appendix which contains all of the tables. Separating the textual and tabular material enables multiple reference to the same table with increased efficiency in reading. Placing the tables at the end, however, should not imply their subordinate importance. The data supporting each section of the discussion are presented in detail to enable the reader to decide if the inferences drawn follow logically from the findings.

Sources of the data

During the fall semester, 1961-62, questionnaires were mailed to all of the schools and classes listed in the American Annals of the Deaf, Volume 106, 1961. A number of classes replied that the questionnaire was inappropriate for them, because they no longer had deaf students or were not engaged in their education. In other cases, it was found that the class had been closed, often because of an inability to obtain teachers.

Table 1 gives an accounting of the responses of the schools and classes. The overall response rate of 55.9 percent is excellent compared to the usual expectancy from mail surveys. For a number of reasons, the schools provided a higher proportion of usable returns than did the classes. The person in charge of a small class within a large school system was frequently unable or unwilling to obtain much of the information that was asked. In other cases, the time taken for the questionnaire to clear administrative channels so delayed its return that it arrived too late for inclusion in this study.

The analysis by type of installation --- public residential, private residential, day school, private day center, public day class --- and size of enrollment (Table 2) indicates that the usable responses were obtained from a representative group of schools and classes. While a larger proportion of schools than classes are included in this study, this discrepancy works to the advantage of the study in that it provides information on visual aid practices with nearly three-fourths of the deaf students. Approximately 70 percent of deaf students are enrolled in schools for the deaf. The larger response from the schools, then, tends to present a more complete picture of the role of visual aids in the education of the deaf child.

Separate questionnaires were designed for the schools and the classes. Aside from appropriate changes in phraseology, both questionnaires request the same information. A note at the end of each table indicates the source: S for school, C for class, and A for administrator questionnaire.

In April, 1962, a number of superintendents were interviewed at the Conference of Executives of the Deaf convention in Austin, Texas. Some executives who could not be contacted at this meeting were subsequently queried by mail. With but one or two exceptions, the interviewees were superintendents or principals of schools. This choice of respondent was dictated by the fact that for many of the classes the administration of visual aids is largely the responsibility of someone in the school administration who is not necessarily connnected with the education of the deaf, but rather is responsible for the visual aid program in the entire school system. In this regard, it should be noted that well over half of the cooperating classes have enrollments of less than 25 students, while over 80 percent have less than 50 students (Table 3).

Rating the visual aid program. Five questions were selected as benchmarks of a good visual aid program. Their choice, of course, was arbitrary. However, as will be indicated in the discussion to follow, there is some internal evidence of validity for the ratings which resulted.

Table 4 lists the questions in the rating scale and the weights assigned to each answer.

The first item in this scale deals with the responsibility for the program. The weighting of the responses favors those schools which have a visual aid coordinator. It seems that those schools having the greatest interest in visual aids would at least have someone responsible for the overall program, with the more interested schools having a coordinator.

Providing inservice instruction for teachers appears to be a clear indication that the quality of visual aid instruction would be high. Greater weight is given to those schools and classes which provide such training on a formal basis.

While few schools do not keep a file of information on visual aids, it seems logical that those who do not are apt to have less concern for and interest in their visual aid program. The quality of the file cannot, of course, be assessed from the questions asked. Therefore, the scoring provides only for the two possibilities, yes or no.

The mere possession of the facilities to produce visual aid materials indicates that the respondent is somewhat invested in the visual aid program. A further increment in scoring is given if the respondent reports that he has developed some materials for classroom use.

The possible scores range from 0 to 11. Because the size of the school or class is an important parameter in determining the visual aid program, it is taken into consideration in rating the schools. The comparisons are made between schools and classes of roughly equivalent size. GROUP I schools have enrollments of less than 100 pupils; GROUP II schools have enrollments between 100 and 249 students; and GROUP III schools have enrollments of 250 or more students. GROUP I classes have enrollments of less than 13 pupils; GROUP II classes have enrollments between 13 and 49 students; and GROUP III classes have enrollments of 50 or more students. "A" ratings are given to those schools and classes that scored from seven to 11 points; "B" ratings are given to schools and classes earning from three to six points; and "C" ratings are given to those schools and classes earning less than three points. Table 5 lists the number of schools and classes in each category.

Coding the responses. All surveys must contend with the problem of failure to respond. Even though instructions were clearly given to put a zero or other mark to indicate "none", many schools and classes failed to to this. It would have been an easy decision to convert all of these blank spaces to negative or zero responses. However, this has not been done, because it may provide far more misleading information than would occur by interpreting these failures to answer.

A school which did not indicate the number of slides they own, for example, may not own any. On the other hand, the busy administrator in filling out the questionnaire may have left this question blank with the intent of returning to it after he had had a chance to inventory his resources. A teacher in a class for the deaf may have left the item blank pending a reply from the Board of Education as to how many slides are assigned to her unit. In both cases, when they were reminded of the deadline for the return of the questionnaire, they may not have noticed that they failed to indicate anything concerning this item. Now if their responses were accepted as indicating zero numbers of slides, the scoring would be erroneous in both of their cases.

The decision pursued here has been to set all such answers aside and to indicate their number to the reader. With all of the data in hand, then, the reader can determine for himself the most suitable way of dealing with these always annoying lacunae.

Physical Plant

One of the problems in the education of the deaf child in the classes is evident from the data in Table 6. Over 90 percent of the classes consist of ten or fewer rooms. Approximately 60 percent consist of a single room. On the other hand, more than 60 percent of the schools have 21 or more rooms.

With such small groups of children, usually under one teacher in one room, it is difficult to provide much specialized equipment and material. Even more difficult is the lack of stimulation from colleagues in the same work and from an administration in full sympathy with the educational problems and objectives of the teacher of the deaf. The problem of size of the teaching unit, however, is only considered here insofar as it relates to visual aids.

All of the schools and classes report that their rooms are adequately equipped for visual aids. All classrooms have electrical outlets and window shades; so, with regard to these facilities at least, the classrooms are apparently able to handle most visual aid equipment.

The majority of schools and classes report that they do not have a separate visual aid room (Table 7). Though the questionnaires specifically asked that they disregard the school auditorium, it is likely that some of those who replied that they have a separate visual aid room are, in fact, referring to the school auditorium.

Most of the educators state that they do not have a special visual aid room because they prefer to have visual aids used in each classroom. The next most frequent reason is that space is not available for such a purpose. It is of interest to note that only four schools and one class give as their reason for not having a special room the lack of funds.

From the small amount of data gathered concerning physical plant, there do not appear to be any characteristics of the buildings themselves that would prevent the educators from doing as they wish with visual aids. In most cases this would be to use them in each classroom.

Visual Aid Budgets

As would be expected from the discrepancies in their enrollment, the schools and classes vary widely in the amount of money available to them for their operations (Table 8). Over half of the schools have operating budgets in excess of $500,000. Nor does this tell the entire story. Almost one-fifth of the schools have total budgets in excess of $900,000. In contrast to these figures, almost one-half of the classes have total operating budgets of less than $20,000. Only one of the classes reporting has a budget of $900,000 or more. The next three classes in size of budget do not exceed $400,000.

The remaining budgetary figures, of course, reflect this large disparity between the amount of money available to the schools and to the classes. More than half of the schools have instructional budgets in excess of $10,000 (Table 9). Forty-seven percent of the schools have from $10,000 to $30,000 with which to purchase instructional materials. The five most affluent classes report budgets for instructional materials of about $9,500. More than half of the classes have a budget of less than $900 for materials.

More than half of the schools indicate that they budget less than $600 for visual aids (Table 10), and more than half of the classes budget less than $200 for visual aids. It is possible that these figures are not as discouraging as they may at first appear. The majority of schools (75 percent) and classes (65 percent) state that they have no fixed budget for visual aids, but rather that they spend as the need arises and as funds are available (Table 11). The remainder either budget for specific items, a fixed amount per pupil, a fixed percentage, or in other ways.

It is necessary to turn to additional data to get some idea of the amount of money spent annually on visual aids. The questions posed referred to the amount of money spent, as opposed to the amount of money budgeted (Tables 12, 13, 14, 15).

The median visual aids expenditure by the schools reporting is $662 for 1958-59, $675 for 1959-60 and $725 for 1960-61. The slight rising trend expressed by these figures may only reflect increased costs, rather than an increase in the amount of equipment and material purchased.

More than half of the schools spent less than $300 on visual aid equipment in each of these three years. An equal amount is reported as spent by approximately 50 percent of the schools in this same period for material. Less than $100 annually was spent for building adaptation by seven percent of the schools.

Despite the seemingly small amounts of money budgeted and spent on visual aids, 60 percent of the school administrators stated that the money available for visual aid equipment was satisfactory. There is no relation between satisfaction with the available visual aid funds and either size of school or quality of program.

The superintendents were asked if they felt that a separate visual aid budget was necessary. The majority (63 percent) indicate the need for a separate item in the budget to cover visual aids (Table 16). Those who favor this response most frequently do so because they believe that it will aid in long-range planning. The second most frequent reason given is closely related: without a separate budget, money is frequently spent on other things. Encouraging the purchase of better equipment and of economy in the purchase of materials, the third and fourth most frequent reasons given, can also be considered the most specific examples of what is meant by better planning. A few superintendents suggest that a separate budget will more clearly indicate a need for increased visual aid funds and personnel.

Those who oppose a separate visual aid budget feel that visual aids should not be separated from other instructional tools. They argue that the funds for visual aids should be drawn from the existing budget for instructional equipment and materials.

Lack of a separate budget for visual aid expenditures is significantly related to the quality of the visual aid program in the classes. 53 percent of the schools rated "A" have no fixed budget, while 62 percent of the schools rated "B" and 88 percent of those rated "C" have no fixed budget for visual aids. Size of class is not significantly related. This trend does not hold for the schools, largely because such a large proportion do not have fixed budgets of any sort, though the percentage of schools with better-rated programs do more frequently account separately for visual aid expenditures in their budgets.

The opinions of the administrators and some of the evidence of this study suggest that separate budgets for visual aid expenditures are advisable. The particular budgetary procedure does not seem an important variable, so long as some provision is made in the budget.

National Defense Education Act

The schools and classes were asked if they had applied for National Defense Education Act (Title III) funds. Only 15 percent of the schools reported that they have applied for such funds. By contrast, 42 percent of the classes have applied for this governmental assistance. (See Table 17.)

The most frequent reason offered by the schools for not applying is that they were unaware of the NDEA program. "No staff member in touch" is the answer checked by 40 percent of the schools. Though not as frequently, many of the classes (28 percent) also offer this explanation. Lack of matching funds and state, school or district policy against participation in this program are the other reasons given with some frequency. Only a few of the schools and classes indicated that their application had been refused or had not been submitted in time.

For the classes, there is a statistically significant relation between the quality of the visual aid program and application for NDEA funds. Seventy percent of the "A-rated" classes reported that they had applied for NDEA assistance. The classes with "B" ratings reported that they had applied in 62 percent of the cases. The "C-rated" classes, on the other hand, had only 21 instances of applying. Size of the class was not a statistically significant factor related to whether or not application had been made.

Because of the very small proportion of schools that had made application for funds, the differences in the quality of program between those who did and did not apply for NDEA funds are not analyzed. The size of the school and quality of program do not seem related to the reasons given for not applying.

Visual Aid Equipment

Each school and class was asked to inventory their visual aid equipment and to estimate their needs for the immediate future. The results are summarized here in a somewhat adumbrated manner. The size of movie projectors, for example, has been ignored in presenting the results. This has been done to facilitate the analysis of the data and to promote readability. More detailed analyses can be made for specialized purposes.

Movie projectors. (Table 18.) Almost every school and class owns at least one movie projector. 68 percent of the schools report that they own two or more; 63 percent of the classes also have two or more. Of the three classes stating that they do not own a movie projector, two have such equipment assigned to their class.

The majority of classes do not feel the need for any additional movie projectors. The reverse is true for the schools, with the majority stating that they desire at least one more than they now have. These figures probably do not indicate a lack of interest in motion pictures by the classes, but rather reflect the smaller number of rooms and students that they have. Since many of the classes consist of only one or two rooms, there would appear to be no necessity for several motion picture projectors. The number of movie projectors owned is significantly related to the size of the school and the quality of its visual aid program. For all schools combined, the average (mean) number of projectors owned is 2.44 per school. The average for small schools is 1.72; for medium sized schols, 2.03; and for large schools, 3.54 projectors. Schools with programs rated "A" had an average of 3.60 projectors; those rated "B", 2.36; and those rated "C", 1.68 projectors.

These relationships do not hold for the classes. The average class owns one projector. The large classes own 1.4 projectors; the medium sized, 1.1; and the small, .9 projectors. The "A-rated" programs have 1.3 projectors; "B-rated", 1.1 projectors; and "C-rated", 1.1 projectors. The slight differences do not approach statistical significance. The reason, of course, is that very small classes may be a part of a very large school system; and, though the visual aid program for the deaf may be good or poor, much equipment may be available through a central pool. Thus, the relationship between size and quality of program which hold for the schools, which constitute independent units, cannot be expected to hold for classes which are interdependent units of larger systems.

Opaque and overhead projectors. (Table 19.) The grouping together of opaque and overhead projectors is far less justified than grouping movie projectors by size. The overhead projector has a substantial advantage over the opaque projector in the instruction of deaf children. Aside from mechanical advantages, the overhead projector also permits viewing in daylight, so the teacher's face is visible to the students throughout the presentation, while the students are visible to the teacher. Nonetheless, economy of analysis dictated this grouping. Since it is likely that the overhead projector will replace the older, less efficient opaque projectors, it is also likely that those who purchased an opaque projector will in time replace them with an overhead projector.

Again, only a small number of schools do not own an opaque or overhead projector, while a much larger proportion of the classes (13 percent) do not own this equipment. A little more than half of the schools and about 40 percent of the classes own two or more such projectors.

About three-fourths of the schools and half of the classes signified their desire for additional equipment of this kind. Most of the classes estimate that they need only one more projector. The schools, however, indicate additional need for as many as nine more pieces of such equipment. About half of the schools state that they need two or more overhead projectors.

Overall, the schools indicate that they own, on the average, two overhead and/or opaque projectors. The averages by size of school are: 1.4 for small, 1.7 for medium, and 2.9 for large. The averages by quality of program are: 2.8 for "A", 1.8 for "B", and 1.3 for "C".

The average number of opaque and/or overhead projectors available to the classes is slightly less than one. Although there is a tendency for larger classes to have more of this equipment than small classes, the relationship is not statistically significant.

Tachistoscopes. (Table 20.) For both schools and classes, the tachistoscope is not a popular instrument. Almost half of the schools and more than half of the classes report that they do not own a tachistoscope. What is more, 53 percent of the schools and 48 percent of the classes indicate no desire to add a tachistoscope to their present inventory.

The average school has less than one tachistoscope (mean = .62). The relations between size of school, quality of program, and number of tachistoscopes hold in this instance. On the average, large schools own .9 tachistoscopes, medium sized .6, and small size .1 tachistoscope. Schools with "A" ratings average 1, "B" ratings .6, and "C" ratings .1 tachistoscope per school.

So many classes failed to respond to this item that statistical analysis is unwarranted for them. In a positive sense, it can only be said that 11 classes report owning one or more tachistoscopes. Had the failure of the 114 schools who did not respond been assumed to mean that they own no tachistoscopes, then 93 percent of the classes do not have such equipment. In any event, little can be gained from manipulating the data referring to but 11 classes. It is obvious that tachistoscopes are not a common piece of equipment to be found in the classes.

Filmstrip projectors. (Table 21.) Somewhat fewer classes than schools state that they do not own a filmstrip projector. An equal number of schools and classes state that they own two or more. What is more, the classes further demonstrate a greater interest than the schools in filmstrip projectors by more frequently indicating that they desire additional ones.

The large schools have an average of 5 filmstrip projectors, medium sized schools 2.4, and small schools 1.5 filmstrip projectors. The overall average for the schools is 3.1 filmstrip projectors. The schools with "A" ratings have 4.1, those with "B" ratings 3.2, and those with "C" ratings 2.1 filmstrip projectors.

The average class has 1.2 filmstrip projectors. The tendency for larger classes and for those with higher ratings to have more of this equipment persists, though it does not reach statistical significance.

Bioscopes. (Table 22.) Only 43 schools and 52 classes checked this part of the inventory. The results are, therefore, questionable, unless one considers the failure to answer as indicating absence of this equipment. 49 percent of the schools and 52 percent of the classes answering this item indicate that they do not own a bioscope. In the case of both the schools and the classes, the overwhelming proportion have no desire to own one.

Because of the small numbers answering this item in each case, no further analysis is warranted for either the schools or the classes. It can be readily concluded that biocopes are rarely owned and seldom desired.

Teaching machines. (Table 23.) A substantial proportion of the schools and classes also did not check a response which would indicate the number of teaching machines they own or desire. Of the 40 schools that do answer, 78 percent state that they do not own a teaching machine. 54 percent indicate no desire to own one. Of the classes responding, 83 percent say that they do not own a teaching machine, and 70 percent indicate no desire to have one. It can be concluded again that few schools and classes own teaching machines and fewer seem to be interested in them.

Slide projectors. (Table 24.) The overwhelming proportion of schools own at least one slide projector. 57 percent own two or more, and 26 percent own four or more. Exactly half of the schools reporting state that they have no desire for additional slide projectors.

The majority of classes also own one or more slide projectors. As might be expected, only 40 percent indicate that they own more than one. 55 percent state that they would like to own at least one more slide projector.

As with other types of equipment, the number of slide projectors owned by the schools varies in proportion to the size of the schools. On the average, large schools own 3.9, medium sized 2.3, and small size schools 1.6 slide projectors. The average number of slide projectors for all schools is 2.7 slide projectors. The "A-", "B-", and "C-rated" schools own 3.9, 2.6, and 1.6 slide projectors, respectively.

The average class has one slide projector. There is no relation between size of class nor quality of program and the number of slide projectors owned.

Television receivers. (Table 25.) The classes reporting indicate that they have television receivers of their own or available to them in a greater proportion of instances than do the schools. 78 percent of the classes own one or more television sets, as opposed to 53 percent of the schools. An additional 54 percent of the classes have television receivers assigned for their use.

The smaller number of classes indicating a desire for one or more televison receivers probably reflects the fact that they already have a sufficient number available to them. 53 percent of the schools state that they would like one or more television receivers in addition to those they now own.

The average school has 1.1 television receivers. There is no relation between size of school nor quality of program and number of television receivers. This result is not unexpected. The value of a television receiver depends, in part, on geographical location. The ability to receive a clear signal and the quality of what is received will vary with the proximity to and quality of the local broadcasting unit. Schools with excellent quality visual aid programs, as well as schools of great or small size, can be located in an area where little of educational value is available from local stations.

The classes, on the other hand, do demonstrate a relationship between ownership of television receivers and both quality of the program and size of the school. The average for all classes is barely one receiver per class. Small classes have .4, medium 1.0, and large 1.3 receivers per class. Classes with "A" ratings report 1.5, those with "B" ratings 1.3, and those with "C" ratings report none. For the same reasons as apply to the schools, these findings seem consistent. The majority of classes are located in metropolitan areas. They are, therefore, likely to be in an area having good television reception.

Schools and classes were asked to indicate the ways in which they used their television receivers (Table 26). 86 percent of the schools having receivers use them principally for broadcasts of national and local interest. A little less than 10 percent use television to supplement regular courses, and only 4 percent use complete courses on television. By contrast, 49 percent of the classes use their television principally for broadcasts of national and local interest; 22 percent regularly supplement their courses with television; and 27 percent use complete courses. the difference, again, may largely be a function of the locality of the school or class. Educational television stations, for instance, are as yet largely confined to a few metropolitan areas. Such stations are a major source of complete courses in science, language, etc. The place of television in the visual aid program, then, would appear to be dependent upon local facilities which are not in the control of the schools and classes.

Television cameras. Neither the schools nor classes evinced any interest whatsoever in television cameras. Only one of the schools and six of the classes reporting state that they own a television camera. Only one school indicated an interest in having one.

Motion picture cameras. (Table 27.) Few schools responded to this item, probably indicating that they do not own any of this equipment. 54 percent of the schools that did report say that they own one or more cameras, while 38 percent of the classes reporting also have one or more cameras. 29 percent of the classes indicate that a camera is available to them. 49 percent of the schools would like to own a camera or add one to their existing supplies. Only one-third of the schools feel the need for an additional camera.

The uniformity of response together with the small number of schools and classes reporting do not make further analysis of this item appear worthwhile.

Still cameras. (Table 28.) The majority of schools and classes own one or more still cameras. In view of this substantial ownership, it is not surprising that only 42 percent of the schools indicate a desire for one more. The fact that almost all of the classes fail to respond to this item would suggest that their interest is at a minimum.

The average school owns 1.7 still cameras. There is no significant relation between owning a still camera and size or quality of visual aid program. This is equally true for the classes. On the average .9 cameras are owned by each class.

Cameras, in contrast to the other visual aid equipment, are used in the preparation of visual aid material. The data concerning them are presented here, but more will be gleaned from the section on the preparation of visual aid materials.

Visual Aid Materials

Slides. (Table 29.) The majority of schools have collections of slides. Better than one-third of the schools have over 100 slides. Nearly half of the classes, on the other hand, do not own a collection of slides, nor is this figure improved greatly by considering available resources within the schools in which they are housed.

Neither the schools nor the classes indicate a great need for additional inventories of slides. Only about 60 percent of the schools and less than half of the classes indicate the desire for more slides.

Filmstrips. (Table 30.) Most of the schools and classes own filmstrips. They also indicate, in most cases, a desire for more. For the schools, there is a distinct relation between the number of filmstrips owned and size and quality of the program.

Silent and sound films. (Table 31.) While the majority of schools do not own nor have any films on long-term loan, more than half of the classes do. On the other hand, the majority of the schools state that they rent films. Neither the schools nor the classes, generally, indicate much desire for additional films.

Captioned films. (Table 32.) One or two schools and classes say that they own captioned films. These are obviously films other than those obtained through the government program. The majority of the schools indicate that they had rented captioned films, apparently meaning that they had borrowed them through the Captioned Film program. The schools also desire many more; the classes, on the other hand, do not express the same level of interest in captioned films.

Filmed courses. (Table 33.) Only a small minority of the schools and classes use filmed courses, either completely or in part. Only 18 percent of the schools and 23 percent of the classes (Table 34) plan to try filmed courses during the next two years. The willingness to try filmed courses in the next two years is related to the size of the school and the quality of its program. The larger schools and those with better rated programs more frequently signify their intention to try filmed courses in the future.

Globes, charts, maps and picture libraries. (Tables 35, 36, 37, 38.) Though not defined as visual aids, information about these materials was gathered to provide some contrast to the data on visual aids. Almost all schools and classes own globes, maps, charts, and picture libraries. Most of the schools report that they want more globes, but this is not true for the classes, probably because those having one would find their needs satisfied. This same holds true for permanent charts and maps. Though almost all of the schools own them, they desire more, while the classes own, but do not desire, more.

Picture libraries are a traditional mainstay for the teacher of the deaf. It is apparent that in the few instances where a school or class states that they do not own a picture library that they do not have in mind the usual collection of printed pictures which almost all teachers accumulate for themselves.

Sources of films and filmstrips. (Table 39.) The most freqnently used sources of films and filmstrips, in order of preference, for the schools are Captioned Film program, free films from business and trade associations, and commercial sales or rental agencies. Aside from the Captioned Film program, the schools make little use of films and filmstrips from other governmental agencies.

The most frequent source of films and filmstrips for the classes is their own school system. The next most frequent is the city or county public library, followed by the free films from business and trade associations and those from a university film library. Only a small proportion of the classes borrow films from the Captioned Film program.

A few schools belong to a county or regional film cooperative; the proportion of classes is somewhat larger, though still quite small (Table 40). Film cooperatives do not appear to be a significant source of material for the schools and classes for the deaf.

Production of Visual Aids

The majority of schools and classes do not have facilities for producing visual aid materials (Table 41). 47 percent of the schools and 62 percent of the classes state that they have no means for making their own visual aid materials.

Apparently those schools which have facilities for producing visual aids use them (Table 42). 38 schools stated that they had facilities for making visual aids and 29 replied that they had developed some materials. Similarly for the classes, 56 said that they had facilities and 47 said that they had made use of them.

The schools develop materials for preschool and elementary schools subjects most frequently, while the classes tend to prepare materials in the area of language development. Actually, both groups may be referring to essentially the same areas.

Very few of the visual aids developed fall within the definition of visual aid materials as defined in this study (Table 43). Slides, movies, and filmstrips are far less frequently mentioned than photographs, pictures, flash cards, and charts.

About 40 percent of the schools and classes who have developed some visual aid materials state that they would be unwilling to share them with other schools and classes (Table 44). It has been suggested by way of explanation of this lack of cooperativeness that the unwillingness is based more on a feeling of inferiority than a lack of charity. The schools and classes who state that they are unwilling to share their material may be unduly modest in feeling that they will not be valuable to others.

Schools are also asked whether or not they planned to develop visual aid materials in the next one or two years (Table 45). Less than half of the schools and classes state that they have such plans. Among the schools that say they will develop additional visual aids, they again emphasize preschool and primary materials. The classes, as before, have plans to develop materials in the language arts. Surprisingly, in view of other evidence of interest, none of the schools and classes intend to make filmstrips, and only one to make a movie. Slides are the most frequently mentioned visual aid material that schools intend to produce.

While the majority of the schools and classes who plan to develop visual aids state that they would be willing to share them, a small number still say that they would not make their materials available to others (Table 46). It is difficult to apply here the explanation that they do not believe their materials are worth bringing to other people's attention. After all, there are few instances in which one deliberately sets out to create an inferior product.

Further information about future plans for the development of visual aids is obtained from the supervisor's questionnaire (Table 47). 58 percent of the superintendents say that their schools have no plans for developing their own visual aid materials. Only a handful give reasons why they will not engage in this activity. Of those who do have plans, the most frequently mentioned type of visual aid material they will produce is the slide. Next in order are movies.

In general, it would appear that most schools and classes recognize that the production of visual aid materials is a costly and difficult project. Those schools that have the facilities and inclination to do so should be encouraged to produce their own material. However, the future for visual aid materials designed specifically for the education of the deaf child will likely require government support. The recent Congressional action freeing Captioned Films for entry into the educational field will undoubtedly prove a boon in this respect. One other avenue might also prove worthy of investigation; the cooperation of groups of schools and classes could be highly beneficial to all concerned. While the schools and classes for the deaf do not seem to find it profitable to join a county or regional cooperative with schools and classes for the hearing, similar groups designed solely for the cooperation of units devoted to the education of the deaf might very well prove an answer to the difficult problem of obtaining sufficient appropriate material.

Inservice Training for Teachers

Recent developments in visual aid equipment, materials and techniques would seem to require inservice training for teachers to assist them in keeping abreast of these developments. It is pleasing to note, therefore, that the majority of schools and classes have made some provision for instructing their teachers (Table 48). However, one cannot disregard the 44 percent of the schools and 37 percent of the classes who do not have any inservice training program, sizeable proportions in each group.

In the schools, the supervisor, principal or assistant principal is the person most likely to be conducting such classes. A number of the schools indicate that any faculty member who has some skill with visual aids may be the one to instruct the other teachers. A few schools make use of a visual aids specialist, sometimes from outside and sometimes from within the schools. The supervising teacher, science instructor and librarian are also mentioned.

The majority of classes that have inservice training employ a visual aids specialist. In fewer cases, the supervisor, principal, or assistant principal may assume this responsibility. Otherwise, the remaining choices to provide this service appear in about the same proportion in the classes as they do in the schools.

In both the schools and classes, inservice training tends to be on an informal basis (Table 49)/ Those schools and classes which set a specific amount of time for this activity would seem to be the exception (Table 50). The majority of schools and classes indicate that their inservice instruction is on an informal basis, with the attendance of the faculty not usually required.

While inservice training in visual aids appears to be somewhat desultory in most of the schools and classes, the superintendents tend to feel that their teachers do not have sufficient skill in their use. 74 percent of the superintendents state that they do not feel that their teachers make sufficient use of visual aids, because they do not know how to use them. Superintendents of schools with the better-rated programs more frequently agree with this statement than those with the poorer programs. Superintendents whose programs are rated "A" answer affirmatively in 77 percent of the cases, 85 percent for "B", and only 47 percent for "C-rated"schools. There is no statistically significant relation between size of school and response to this statement. Most of the superintendents believe that a course in the use of visual aids should be required of all teachers of the deaf (Table 51). The modal reason given in support of this opinion is that such a course would help the teacher get the most benefit from visual aids for her pupils. The few who do not agree that a course in visual aids should be required support their opinion with the contention that such training can be obtained in service. Only two superintendents feel that such a course would have little value.

Most of the administrators state that they would prefer a teacher with visual aid training. Those who do not feel that they would give preference to such a teacher state that other qualifications would be more important. Others remark that such training could be given in their school, while still others believe that visual aids, themselves, are not that important.

Administration of Visual Aid Programs

If an educational program is to succeed, it must have the support of the school administration. The leadership provided by the superintendent, principal, school board, etc., will largely direct the efforts made by the teachers. Ideas, new or old, which do not have hierarchical support have little opportunity to flourish. Conversely, those concepts which are favored by the school administration can be expected to have an excellent probability of acceptance and, if valid, of successful implementation.

Responsibility for the visual aid program. The answers to the questions designed to elicit information as to who bears the responsibility for the visual aid program indicate that there is no single answer even within the same school. Approximately one-third of the schools and classes do not name anyone as being in charge of their visual aid program (Table 52). However, the fact that no person is named as having the sole responsibility for the direction of the visual aid program should not necessarily be construed as indicating that aspects of the visual aid program are not given direction by some responsible person or persons. While overall administration of the visual aid program may be lacking, responsibility for various segments of the program may be assigned to different individuals. In general, however, it is likely to hold in most cases that a program for which no one person is responsible is not apt to be well respected nor well implemented.

In the mail questionnaire, the position of the person responsible for coordinating the visual aid program is frequently omitted or unclear. The number of visual aid coordinators, therefore, must be estimated from the interview schedule. While 19 of the 64 schools list a visual aid coordinator, only 13 indicate that he is solely responsible for the coordination of the program (Table 53).

Next most frequently named as responsible for visual aid coordination is the teacher, herself. In effect, this is equivalent to the response "No program", since both responses indicate no overall coordination of visual aids. Adding together the responses to these two categories, one finds as many schools with visual aid coordinators as without coordination, whatsoever.

The principal is the next most frequently named person in charge of the visual aid program. In fact, if one adds the instances in which he is named alone to those in which he is named in addition to some other person, one finds that the principal coordinates the visual aid program in about one-third of the schools. The choice of the principal in this regard would appear, then, to be fairly common.

While only a small proportion of the schools indicate that they have a visual aid coordinator, a majority of the school superintendents indicate that this is an important position (Table 54). Oddly enough, the small and medium size schools feel a visual aid coordinator would be an important addition to their staff proportionally more often than the large schools.

The majority of the superintendents who believe that a visual aid coordinator is very important justify their opinion in terms of efficiency (Table 55). Because visual aid equipment is expensive and generally cannot be supplied to each teacher, it is apparent that some kind of scheduling must take place. Furthermore, instruction in the use of such equipment, its maintenance, and the scheduling of materials which can be used by more than one class are all duties that might well be centralized under one specialist.

Additional functions that could be served by a visual aid coordinator and, from the response, of equal or greater importance to the superintendents, would be the evaluation and selection of materials and advising of teachers on recent developments. The superintendents also expect a visual aid coordinator to suggest new uses of available materials and to indicate to the teacher where such materials might be used best. Preparation of materials is another function that the superintendents feel a visual aid coordinator could fulfill.

Turning to particular aspects of the visual aid program, the superintendents were asked to specify for each of nine activities who in their school was assigned the responsibility for it (Table 56).

Suggesting visual aids. The majority of schools indicate that suggestions for visual aids generally come from more than one source. The teacher, alone, initiates requests for visual aids in 18 percent of the schools. She is also one of a combination of people in an additional 15 percent of the schools. Altogether, then, the classroom teacher is involved in the initiation of visual aid requests in approximately one-third of the schools. The principal is next most frequently named; the visual aid coordinator follows the principal in order of mention, and, in turn, is followed by the faculty committee. The superintendent is mentioned by only one school as being involved in suggesting visual aids.

Teacher training. Instructing the teacher in the uses of visual aids is primarily the principal's task. The visual aid coordinator is next most frequently named, while the supervising teacher occupies the third rank.

Suggesting new materials. The principal is most frequently mentioned as the source of requests for new material. The visual aid coordinator and supervising teacher are next in order of those who initiate these requests. In only a small proportion of the schools is the classroom teacher mentioned as the principal initiator of such requests.

Informing teachers of new developments in visual aids. (Table 58.) The overwhelming majority of schools and classes indicate that they have some systematic program by which they inform their teachers of new visual aid equipment and materials. There is a clear trend indicating that a lack of systematic program for informing teachers is characteristic of an overall program of poor quality. While this is more evident in the ratings for the classes, the difference is probably due to the fact that there are fewer schools than classes.

The principal is most frequently assigned this responsibility. Second to him in frequency of mention is the visual aid coordinator.

Ordering material and equipment. The principal, alone or in cooperation with one or more other people, orders material and equipment in about one-half of the schools. With much less frequency are the visual aid coordinator and supervising teacher mentioned as having this responsibility.

Equipment maintenance. The principal, the visual aid coordinator, and the supervising teacher, in that order, are most frequently mentioned as being responsible for maintenance and repair of visual aid equipment. This responsibility is shared by more than one person in only a small proportion of the schools. Only one school indicates that the teacher must take care of her own equipment.

Classifying and storing material. The most frequently named person for this aspect of the visual aid program is the visual aid coordinator. Next in order of mention is the supervising teacher, followed by the principal. In fourth place is the librarian. This is the only instance in which the librarian is mentioned as having some responsibility for the visual aid program.

Preparing specialized materials. The teacher alone or with others most frequently develops visual aid material. Next in frequency of mention is the visual aid coordinator, followed by the principal. 16 percent of the schools say that no one is responsible for this activity.

Evaluating and selecting of visual aids. This task is shared by more than one person in 61 percent of the schools. Where a single person is assigned this duty, it is most frequently the principal and, next, the visual aid coordinator. There is a slight difference between the schools and classes in the modal method by which selection of visual aids takes place (Table 59). The schools most frequently mention selection by a committee, with requests from individual teachers as the second most frequent method. These two procedures are reversed in order of frequency of mention in the case of the classes. With so many of the classes consisting of a single teacher, it is logical that this should be the case. The third choice, selection is stimulated by the entire supervisory staff, differs only slightly from the committee approach. Such an answer, however, does suggest that the procedure is less organized than when a formal committee exists. The infrequent mention of the visual aid coordinator in this regard is consistent with the assumption that this position exists in so few of the schools and classes. The fact that the percentage of instances in which a visual aid coordinator is mentioned is greater for the classes than for the schools suggests further that the visual aid coordinator so named is unlikely to be a specialist on deafness, but rather is the visual aid coordinator for the entire public school system of which the class is only one small part.

Purchase of equipment and materials. The superintendent assumes this responsibility in approximately one-third of the schools. This is the only activity in the visual aid program where the superintendent is indicated as having a dominant role. As might be expected, the next most frequently mentioned person is the principal (Table 57). In fact, he is more frequently mentioned as purchasing materials, while the superintendent is more frequently mentioned as purchasing equipment. The visual aid coordinator is seldom mentioned as the person solely in charge of purchasing.

Scheduling of visual aids. In almost half of the schools the principal schedules the visual aids. The visual aid coordinator is the next most frequently named, followed by the supervising teacher (Table 57).

Files of visual aid information. (Table 60.) Almost all of the schools and classes report that they maintain a file of information about the visual aid equipment and materials. Such a file or files are most frequently kept in the school's main office. The classes, on the other hand, most frequently have more than one file. Their responses probably can be construed as meaning that one of the files is central to the entire school system, while the other pertains specifically to the class for the deaf. The visual aid coordinator, again, receives little mention in this regard, insofar as the schools are concerned. The more frequent mention by the classes is probably a reference to the coordinator attached to the school system, rather than to a class for the deaf.

Extent of use. (Table 61.) In response to the general question with regard to the extent of use made of visual aids, a few schools and classes indicate that less than half of their teachers use visual aids. However, such a response heartily favoring the alternative "Almost every class uses them", does not measure the extent of use within any given class.

Another approach to this question was made in the superintendent's interviews (Table 62). When asked to rate their school's use of visual aids in comparison to other schools, the majority respond that they believe they use visual aids more or slightly more than other schools. Again, these responses can only provide an approximation to the general question. It is interesting to note that the schools with better programs more frequently respond that their use of visual aids is greater than that of other schools, while the poorer rated schools more frequently respond that they use visual aids less than other schools. This relation, however, does not appear to hold true for the first question on the extent of use.

Yet another approach was made to this problem by asking the superintendents if they agreed with the statement, "Some superintendents say that some teachers do not make sufficient use of visual aid materials because they do not know how to use them" (Table 63). The majority of superintendents agree with this statement.

Either directly or indirectly, the superintendents indicate that they believe this statement is obvious and requires no further comment. Of those who agree and do comment, their responses tend to fall in one or two categories: (a) teacher training is inadequate, or (b) women dislike machinery.

The few who disagree seem to feel that the situation can be remedied. Their comments leave some doubt as to whether they do, in fact, disagree.

It would appear, then, that the superintendents share a consensus with regard to the training of teachers of the deaf. They appear to feel, as previous material suggests, that insufficient attention is given in the training of teachers of the deaf to courses on the use of visual aids.

Satisfaction with program. The school administration appears to be divided about equally between those who are satisfied and those who are dissatisfied with the way the visual aids are now being used in their school. There is a tendency, though not statistically significant, for the schools with "C" ratings to more frequently express satisfaction with their programs than schools with "A" or "B" ratings. This finding should not be unexpected if one equates expressed satisfaction with complacency.

In the same vein, the administrators were asked if they feel that their teachers make sufficient use of visual aids (Table 64). A little more than half say that their teachers do make enough use of visual aids. The comments which accompany their answers are interesting. A few felt that the teachers use visual aids too frequently. Others indicate that, though they believe the use their teachers make of visual aids is sufficient under current circumstances, this situation could be improved, either by hiring a coordinator or through better teacher preparation.

Among the comments of those who feel that their teachers do not make sufficient use of visual aids, the most frequently expressed is that their teachers are not properly trained. Others mention the lack of time, equipment, and research as factors contributing to this situation.

A check list of problems that might arise in the administration of a visual aid program was presented to the administrators with the request that they indicate whether or not that particular problem applies to their schools. The administrators tend to agree with near unanimity on some of the points, while splitting almost equally with regard to some of the other problem areas (Table 65).

Opinion is almost evenly divided with regard to whether or not (a) teachers had enough time to preview and prepare visual aid materials, (b) visual aids are difficult to integrate into lesson plans, and (c) teachers have enough information concerning visual aids. In each case, a slight majority do not feel this is a problem in their school.

Again, the superintendents are nearly evenly divided as to their opinion regarding the physical layout of their classrooms. 56 percent indicate that many of their classrooms are not readily adaptable to the use of visual aids.

The teacher who complains that she does not have the time to use visual aids in her classroom can expect little sympathy from the majority of the administrators. About three-fourths of the superintendents indicate that they do not consider this a problem.

With but one exception in each case, the administrators do not believe that their equipment is in poor repair or obsolete, nor do they feel that the equipment they have purchased is too difficult for their teachers to operate. In their own school system, they also do not think that ordering and scheduling equipment present a problem to their teachers. Nor, for 88 percent of them, do superintendents feel that visual aids are too time-consuming for the results achieved.

Only a small minority of superintendents (22 percent) think that students look on visual aids as mere entertainment. Conversely, the majority (72 percent) feel that suitable materials are lacking in many subject areas.

When asked to identify the aspects of their visual aid program which they find least satisfactory, the superintendent's responses cluster about four problem areas (Table 66). Most frequently noted are the size and complexity of the visual aid program and, therefore, the need for someone to coordinate it.

Secondly, attention is directed toward the preparation of teachers for the use of visual aids. A number of superintendents believe that inadequate preparation of the teacher is the least satisfactory aspect of their visual aid program. The lack of suitable materials receives the next most frequent mention, along with the complaint that the teachers are not using visual aids as much as might be desired. Those giving the latter response might well have indicated one of the preceding three reasons for their dissatisfaction with the extent of use their teachers make of visual aids in their schools.

The suggestions made for improvement of their programs reflect the dissatisfaction that the superintendents have with various aspects of their programs (Table 67). Of those who offer suggestions for improvement, they most frequently indicate the need for a visual aid coordinator. Better training for teachers is the second most frequently mentioned means of improving the visual aid program. The remaining suggestions include (a) increased financial assistance, (b) better physical facilities, (c) increased exchange of information within the school, and (d) establishment of a program. The schools with better programs ("A" and "B" ratings) are not significantly more likely to feel the need of a visual aid coordinator than those with poorer programs ("C" ratings).

The administrators were asked to suggest ways in which the teacher training centers can help their schools (Table 68). The most frequent suggestions offered to the training centers are that they teach the teachers how to operate visual aid equipment, select and evaluate materials, and provide experience in working with visual aids. Similar suggestions are that the training centers make the teachers aware of the possibilities of visual aids and instruct them in how to prepare the materials for them. A few of the superintendents merely indicate that training in the use of visual aids is inadequate, without bothering to iterate the obvious that training should be improved.

A number of the superintendents request that the teacher training centers. present a good example to their trainees. They suggest that the teacher training centers use visual aids in their demonstration lessons.

The remaining responses concern research in a broad sense: the training centers should serve as a clearinghouse for information about visual aids and they should study visual aids with the idea of improving techniques and materials.

In a more general sense, some of the comments by the superintendents may reflect their desire to have the teacher training centers provide leadership in this area. For example, one superintendent suggests that the requirement for a teaching certificate should include a course in visual aids. Others, by suggesting that the training centers use, do research on, and provide information about visual aids, may also be implying a felt need for leadership from the training centers.

The superintendents were also asked what kind of assistance they would like to have from the Federal Government (Table 69). The most frequent response is that the Captioned Film program be increased. This wish has now been satisfied by the Congress of the United States.

A number of the superintendents feel that the Federal Government should provide equipment and funds. In some cases the suggestion is prompted by the fact that many of the school systems are legally unable to obtain NDEA funds.

Some of the remaining suggestions are that the Federal Government promote research on visual aids, expand educational TV, and provide training, through either the publication of brochures or a peripatetic expert who would be dispatched to the schools where he would train the teachers.

Future Plans for Visual Aids

For a selected number of visual aids, the schools and classes were asked whether they had some plan to try, to continue to use, or to increase emphasis on it. Reiteration of the questions was fortunate, in that a much higher response rate was obtained than for the inventory. In a sense, this might be expected, since the inquiry was not concerned so much with a fact, involving actual counting, but rather with planning which was directly available from the consciousness of the respondent.

The discussion which follows is based on the data summarized in Table 70.

Broadcast television. The majority of schools have no plan for the use of broadcast television in their schools. 41 percent of the classes also indicate their lack of interest in broadcast television. The classes which do indicate an interest favor continuing its use, rather than emphasizing it more.

Closed-circuit television. For both schools and classes, the vast majority have no plans for closed-circuit television. Among the few who do show some interest, their concern is only with trying it.

Teaching machines. The schools, a little more strongly than the classes, intend to try teaching machines. Only 36 percent of the schools have no plans to try teaching machines, compared with 54 percent of the classes.

Programmed textbooks. Almost identical proportions of schools and classes have plans for programmed texts as have plans for teaching machines. The fact that the two are so closely related conceptually is reflected by these results. 38 percent of the schools and 54 percent of the classes do not intend to use programmed texts.

Captioned films. The popularity of captioned films in the schools is attested by the fact that only six percent have no plans for their future use. The majority of schools indicate their continued use. The classes, on the other hand, are slightly less enthusiastic than the schools. 25 percent of the classes have no future plans for captioned films.

It is likely that the expansion of captioned films into the educational field will have considerable influence on the plans of the schools and classes. The persistent tendency for captioned films to be more attractive to the schools than to the classes may be altered by the new program which permits the Captioned Film division of the Office of Education to produce educational films.

Non-captioned films. There is little question that films will play a large part in the instruction of deaf children if the trends expressed in this data are borne out in the actions of the schools and classes. There is little difference between the two in their intentions to either continue or to increase emphasis on the use of films.

Filmstrips. The remarks concerning films hold for filmstrips *a fortiori*.

Slides. Again, the position of slides in schools and classes is very much alike and occupies an important place in their planning.

Overhead & opaque projectors. Both schools and classes plan heavily on the use of this equipment in the future. The majority of schools plan to continue their use, with a smaller group intending to emphasize them more. In the classes, a substantial group is planning to introduce this equipment into their programs.

School administrator's attitudes. (Table 71.) Although the proportions are somewhat different, the responses on future plans obtained from the administrator's questionnaire confirm the data obtained from the mail survey. Captioned films and filmstrips receive the most enthusiastic endorsement. All administrators indicate that filmstrips will be included in their future plans. Only a small proportion are not including captioned films.

The opaque projector receives a somewhat more favorable reception than the overhead projector. While almost all of the superintendents indicate continued or increased use of opaque projectors, a small proportion have no plans for the overhead projector, and some are hoping only to try it.

Surprisingly, some of the superintendents have no plans for 2 x 2 slides. However, more than half intend to continue the present level of use or to emphasize it more.

As indicated earlier, the interest in television and teaching machines is far less than for other visual aids. About 40 percent of the school administrators have no plans for either.

Conclusions

The satisfactorily high number of returns gives confidence in the representativeness of the survey of schools and classes for the deaf. In terms of numbers of students in the schools and classes completing the questionnaires (they have 73 percent of enrolled deaf students), the response rate permits generalization with few qualifications.

Examining the answers to the particular questions does not readily lead to a succinct statement of the current position of visual aids in the education of the deaf. In some respects the situation appears favorable, while in others it seems in need of much correction.

The schools and classes have adequate physical facilities for displaying visual materials. The superintendents express a desire for improving them, but little problem seems to exist in this area.

Though the amounts of money budgeted for visual aids seem low in proportion to total operating expenditures, few schools and classes complain about finances. There is evidence that suggests the desirability of separate accounting for visual aids. A specific category in the budget for visual aid materials and equipment would enable better planning and would more clearly express the school's growth in this area.

The schools and classes do not appear to want for sufficient equipment. This is borne out not only by their present inventories, but also by their indications of future needs.

Visual aid materials, however, present a serious problem. Many administrators are aware of the lack of materials designed specifically for the deaf. Most films and filmstrips are audio-visual, prepared for seeing and hearing. Nor are the schools and classes making a substantial contribution toward ameliorating this difficulty. The high costs of producing such materials and the skilled personnel required are apt to remain as high barriers to individual action by the schools and classes.

Teacher training is another area deserving consideration. Many administrators recognize the necessity of instructing their teachers in the use of visual aids. Teachers need to know more than how to thread a movie projector. They need to learn how to select materials, make their own, and integrate them in their lesson plans. In this important area, the superintendents tend to look to the teacher training centers for assistance.

Perhaps the greatest improvement in the use of visual aids can be brought about by workshops for the principals. The principal is the single person most likely to be in control of visual aids in any school. As his views expand and his knowledge increases, the entire school can expect to benefit.

Insofar as better materials are concerned, this is apt to require government assistance. The limited market afforded by schools and classes for the deaf has little appeal for the commercial operator. However, schools and classes can band together to share personnel, facilities, and costs. Even so, such efforts are apt to fall short, quantitatively, of the need and, therefore, to require governmental support.

The brighter future for visual aids, then, will depend on increased support from the school administration, coupled with better teacher training and an increase in the amount of visual aid material designed specifically for the education of the deaf child.

TABLE 1

Returns of Questionnaires Mailed to All Schools and Classes for the Deaf in the United States

	Total to whom mailed	Returned complete		Returned incomplete 1/		Not returned	
	No.	No.	Pct.	No.	Pct.	No.	Pct.
SCHOOLS							
Public residential	72	58	80.6	3	4.2	11	15.3
Private residential	16	9	56.3	0	0.0	7	43.8
Day schools	10	8	80.0	0	0.0	2	20.0
Total for Schools	98	75	76.5	3	3.1	20	20.4
CLASSES							
Public day classes	257 2/	126	51.0	45	17.5	86	33.5
Private day centers	46	23	50.0	16	34.8	7	15.2
Total for Classes	303	149	49.2	61	20.1	93	30.7
Totals for Schools and Classes	401	224	55.9	64	16.0	113	28.2

1/ Includes those questionnaires returned complete, but too late for analysis.
2/ 309 were actually contacted, but of these 71 had closed since publication of the last listing of classes in the *American Annals of the Deaf*.

TABLE 3

Enrollment of Schools and Classes in the Visual Aid Survey

	Total to whom mailed		Total responding		
	Number	Enrollment	Number	Enrollment	Percent of total enrollment
Schools					
Public residential	72	16,122	58	14,144	87.7
Private residential	16	1,351	9	680	33.1
Day schools	10	1,841	8	1,220	66.3
Total	98	19,314	75	16,043	87.7
Classes					
Public day	257	7,033	126	3,398	48.3
Private day	46	992	23	231	23.3
Total	303	8,025	149	3,829	47.7
Totals for Schools and Classes	401	27,339	224	19,872	72.8

TABLE 3

Enrollment in Schools and Classes
in the Visual Aid Survey

	Schools		Classes	
Enrollment range	Number	Percent of total	Number	Percent of total
1- 24	3	4.0	81	57.5
25- 49	3	4.0	35	24.8
50- 99	12	16.0	17	12.1
100-149	9	12.0	3	2.1
150-199	14	18.7	3	2.1
200-249	10	13.3	2	1.4
250-299	5	6.7	0	0.0
300-399	9	12.0	0	0.0
400-499	6	8.0	0	0.0
500-599	4	5.3	0	0.0
Total	75	100.0	141*	100.0

* Size of enrollment could not be obtained for 8 classes.

Source: American Annals of the Deaf, 104, 1962.

TABLE 4

Rating of Schools and Classes According to Conditions Which Encourage Effective Use of Visual Aids

List the name or names and position(s) of the person(s) who are responsible for your visual aid program. If your program is integrated by each teacher in her own class and no one is responsible for the overall coordination and maintenance of visual equipment and supplies, please write "none".

Rating:

0 - None; No answer
1 - Any person except Visual Aid Coordinator
3 - Visual Aid Coordinator

Do you now conduct inservice instruction for your teachers in the use of visual aids?

Rating:

0 - No; No answer
1 - Informal inservice instruction
3 - Formal inservice instruction

Do you maintain a file of catalogues of visual aid equipment and materials?

Rating:

0 - None; No answer
1 - Yes

Do you have equipment and facilities for producing your own visual aid materials?

Rating:

0 - No; No answer
2 - Yes

Have you developed any visual aid materials especially designed for teaching or training your deaf pupils?

Rating:

0 - No; No answer
2 - Yes

TABLE 5

Distribution of Schools and Classes

By Size and Visual Aid Rating

Visual aid rating	Schools by enrollment			Total
	1-99 (small)	100-249 (medium)	250+ (large)	
0-2 (below average)	8	11	3	22
3-6 (average)	9	14	13	36
7-11 (above average)	1	8	8	17
Total	18	33	24	75

Visual aid rating	Classes by enrollment			Total
	1-12 (small)	13-49 (medium)	50+ (large)	
0-2 (below average)	12	18	5	35
3-6 (average)	23	33	17	73
7-11 (above average)	9	21	11	41
Total	44	72	34	149

TABLE 6

Number of Individual Classrooms in Schools and Classes

Range	Schools	Percent of total	Classes	Percent of total
1-10	6	8,1	131	92,3
11-15	9	12,1	4	2,8
16-20	14	18,9	3	2,1
21-30	15	20,3	1	0,7
31-40	16	21,6	1	0,7
41-50	8	10,8	2	1,4
51-60	4	5,4	0	0,0
61-65	2	2,7	0	0,0
Total	74	100,0	142	100,0
Data missing	1		7	
Total	75		149	

Source: S & C.

TABLE 7

Number of Schools and Classes
Having Separate Rooms for Visual Aids

	Schools		Classes	
	Number	Percent	Number	Percent
Yes, have a separate visual aid room	24	32.0	34	23.0
No, because				
Prefer to have visual aids used in classrooms	34	45.3	74	50.0
Need rooms for other purposes	8	10.7	14	9.5
Insufficient funds to equip a room	4	5.3	1	0.7
Other reason	1	1.3	13	8.8
One big multiple room is available (auditorium, library, etc.)	2	2.7	6	4.0
Demand does not warrant a special room	2	2.7	6	4.0
Total*	75	100.0	148	100.0

* One class did not answer this question.

Source: S & C.

TABLE 8

Total Operating Budget of Schools and Classes

Budget (thousands of dollars)	Schools		Classes	
	Number	Percent	Number	Percent
900 and over	12	19.3	1	1.4
800 - 899	2	3.2	0	0.0
700 - 799	4	6.5	0	0.0
600 - 699	8	12.9	0	0.0
500 - 599	7	11.3	0	0.0
400 - 499	6	9.7	0	0.0
300 - 399	9	14.5	3	4.1
200 - 299	7	11.3	0	0.0
100 - 199	5	8.1	4	5.5
90 - 99	1	1.6	2	2.8
80 - 89	0	0.0	1	1.4
70 - 79	0	0.0	3	4.1
60 - 69	0	0.0	3	4.1
50 - 59	0	0.0	1	1.4
40 - 49	0	0.0	3	4.1
30 - 39	0	0.0	4	5.5
20 - 29	1	1.6	12	16.4
10 - 19	0	0.0	18	24.6
Less than 10	0	0.0	18	24.6
Total*	62	100.0	73	100.0

* 13 schools and 76 classes did not provide this information.

Source: S & C.

TABLE 9

Budget for Instructional Materials

Budget (thousands of dollars)	Schools		Classes	
	Number	Percent	Number	Percent
60 - 69.9	1	1.7	0	0.0
59 - 59.9	1	1.7	0	0.0
40 - 49.9	0	-	0	0.0
30 - 39.9	3	5.0	0	0.0
20 - 29.9	14	23.3	0	0.0
10 - 19.9	14	23.3	0	0.0
9 - 9.9	1	1.7	5	6.6
8 - 8.9	2	3.3	0	0.0
7 - 7.9	4	6.7	0	0.0
6 - 6.9	0	-	1	1.3
5 - 5.9	3	5.0	2	2.6
4 - 4.9	2	3.3	3	3.9
3 - 3.9	3	5.0	6	7.9
2 - 2.9	6	10.0	6	7.9
1 - 1.9	5	8.3	13	17.1
Less than 1	2	3.3	40	52.6
Total*	60	101.6	76	99.9

* 15 schools and 73 classes did not provide this information.

Source: S & C.

TABLE 10

Visual Aid Budget

Amount in dollars	Schools Number	Schools Percent	Classes Number	Classes Percent
9000 - 9999	1	2.3	5	8.6
5000 - 5999	0	-	1	1.7
3000 - 3999	1	2.3	2	3.5+
2000 - 2999	4	9.3	0	-
1000 - 1999	10	23.3	3	5.2
900 - 999	0	-	0	-
800 - 899	1	2.3	0	-
700 - 799	1	2.3	2	3.4
600 - 699	1	2.3	0	-
500 - 599	8	18.6	1	1.7
400 - 499	4	9.3	2	3.5
300 - 399	1	2.3	1	1.7
200 - 299	0	-	6	10.4+
100 - 199	2	4.7	10	17.2
Less than 100	9	20.9	25	43.1
Total*	43	99.9	58	100.0

* 32 schools and 91 classes did not provide this information.

Source: S & C.

TABLE 11

Method of Budgeting Visual Aid Expenditures

Method	Schools		Classes	
	Number	Percent	Number	Percent
No fixed budget - spend as need arises and funds are available	50	74.6	79	64.7
Budget for specific items	12	17.9	15	12.3
Budget a fixed amount per pupil	2	3.0	8	6.6
Budget a certain percentage	0	0.0	6	4.9
Other non-specified way	3	4.5	14	11.5
Total	67*	100.0	122*	100.0

* 8 schools and 27 classes did not provide this information.

Source: S & C.

TABLE 12

Amount Spent for Visual Aid Equipment by Schools in the Academic Years 1958 to 1960

	1960-61		1959-60		1958-59	
	Number	Percent	Number	Percent	Number	Percent
3,000 - 3,999	1	2.3	0	-	0	-
2,000 - 2,999	1	2.3	2	4.5	2	4.5
1,000 - 1,999	7	15.9	5	11.4	4	9.1
900 - 999	0	-	0	-	1	2.3
800 - 899	0	-	0	-	0	-
700 - 799	2	4.5	0	-	3	6.8
600 - 699	2	4.5	1	2.3	1	2.3
500 - 599	2	4.5	4	9.1	5	11.4
400 - 499	1	2.3	2	4.5	1	2.3
300 - 399	2	4.5	5	11.4	3	6.8
200 - 299	4	9.1	5	11.4	1	2.3
100 - 199	4	9.1	4	9.1	6	13.6
Less than 100	18	40.9	16	36.4	17	38.6
Total*	44	99.9	44	100.1	44	100.0

* 31 schools did not provide this information.

Source: S.

TABLE 13

Amount Spent for Visual Aid Materials by Schools
in the Academic Years 1958 to 1960

Amount in dollars	1960-61 Number	1960-61 Percent	1959-60 Number	1959-60 Percent	1958-59 Number	1958-59 Percent
30,000 - 39,999	0	-	1	2.2	1	2.2
3,000 - 3,999	1	2.2	1	2.2	1	2.2
2,000 - 2,999	0	-	0	-	0	-
1,000 - 1,999	2	4.4	2	4.4	1	2.2
900 - 999	1	2.2	1	2.2	0	-
800 - 899	1	2.2	0	-	1	2.2
700 - 799	1	2.2	1	2.2	0	-
600 - 699	1	2.2	3	6.7	3	6.7
500 - 599	5	11.1	4	8.9	4	8.9
400 - 499	3	6.7	2	4.4	6	13.3
300 - 399	7	15.6	5	11.1	7	15.6
200 - 299	5	11.1	8	17.8	2	4.4
100 - 199	8	17.8	3	6.7	5	11.1
Less than 100	10	22.2	14	31.1	14	31.1
Total*	45	99.9	45	99.9	45	99.9

* 30 schools did not provide this information.

Source: S.

TABLE 16

Amount Spent by Schools to Adapt Buildings for Visual Aids In the Academic Years 1958 to 1960

	1960-61		1959-60		1958-59	
	Number	Percent	Number	Percent	Number	Percent
30,000 - 39,999	1	2.3	1	2.3	0	-
9,000 - 9,999	0	-	1	2.3	0	-
5,000 - 5,999	0	-	1	2.3	0	-
4,000 - 4,999	0	-	0	-	1	2.3
3,000 - 3,999	0	-	0	-	0	-
2,000 - 2,999	0	-	0	-	1	2.3
1,000 - 1,999	0	-	1	2.3	1	2.3
900 - 999	0	-	0	-	0	-
800 - 899	1	2.3	0	-	0	-
700 - 799	0	-	0	-	0	-
600 - 699	0	-	0	-	0	-
500 - 599	1	2.3	0	-	0	-
400 - 499	1	2.3	0	-	1	2.3
300 - 399	1	2.3	0	-	0	-
200 - 299	2	4.5	1	2.3	6	13.6
100 - 199	6	13.6	7	15.9	2	4.5
Less than 100	31	70.4	32	72.7	32	72.7
Total*	44	100.00	44	100.0	44	100.0

* 31 schools did not provide this information.

Source: 8.

TABLE 13

Total Visual Aid Expenditure by Schools

In the Academic Years 1958 to 1960

	1960-61	1959-60	1958-59
30,000 - 39,999	0	1	0
20,000 - 29,999	0	0	0
10,000 - 19,999	0	0	0
9,000 - 9,999	0	1	0
8,000 - 8,999	0	0	0
7,000 - 7,999	0	0	0
6,000 - 6,999	0	0	0
5,000 - 5,999	0	1	0
4,000 - 4,999	0	0	1
3,000 - 3,999	3	0	4
2,000 - 2,999	5	5	1
1,000 - 1,999	10	9	10
900 - 999	2	2	2
800 - 899	1	4	2
700 - 799	2	1	1
600 - 699	2	2	4
500 - 599	4	3	4
400 - 499	3	2	5
300 - 399	3	5	3
200 - 299	3	4	2
100 - 199	2	2	2
Less than 100	5	3	4
Total*	45	45	45

* 30 schools did not provide this information.

Source: 8.

TABLE 16

Number of Schools Favoring or Opposed to a Separate Budgetary Item for Visual Aid Expenditures

	Frequency of Comment	Number	Percent
Favor separate entry		39	62.9
Promotes better long-range planning	8		
If not, money frequently spent for other things	7		
Could purchase better equipment	6		
Could order materials when available and as needed	4		
Already required by state law	3		
Emphasizes need for more funds	3		
Visual aids are very costly	1		
Emphasizes need for visual aid coordinator	1		
Oppose separate entry		23	37.1
Should not segregate visual aids from other instructional materials	17		
Not a part of per capita cost	1		
Total*		62	100.0

* 3 schools did not provide information on this question. Number of comments do not equal number of respondents as some did not comment and others gave more than one reason.

Source: A.

TABLE 17

Number of Schools and Classes Which Did or Did Not Apply for National Defense Education Act (Title III) Funds

	Frequency		Schools		Classes	
	Schools	Classes	Number	Percent	Number	Percent
Did not apply			59	84.3	51	45.1
Reason:						
No staff member in touch	21	13				
No matching funds	13	7				
State, school or district policy against it	6	5				
Other (unspecified)	5	2				
Application refused	3	1				
More pressing needs	2	3				
Application not submitted in time	0	1				
No need for it	0	8				
Ineligible	0	4				
	52	43				
Did apply			11	15.7	62	54.9
Total*			70	100.0	113	100.0

* 5 schools and 36 classes did not provide this information. Of those who did answer, 8 schools and 3 classes did not give a reason for not applying and some checked more than one reason.

Source: S & C.

TABLE 16

Visual Aid Inventory: 8mm and 16 mm Projectors

Number of machines	Schools				Classes					
	Number owned or on long-term loan		Estimated additional number desired		Number now owned or on long-term loan		Number assigned to classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	1	1.3	0	0.0	7	6.4	2	2.2	0	0.0
8	2	2.7	0	0.0	0	0.0	0	0.0	0	0.0
7	0	0.0	0	0.0	2	1.8	1	1.1	0	0.0
6	0	0.0	0	0.0	3	2.8	0	0.0	0	0.0
5	2	2.7	0	0.0	1	0.9	0	0.0	0	0.0
4	7	9.3	2	4.9	5	4.6	2	2.2	0	0.0
3	20	26.7	3	7.3	18	16.5	1	1.1	0	0.0
2	19	25.3	7	17.1	32	29.4	7	7.9	2	4.9
1	22	29.3	14	34.2	38	34.7	43	48.3	13	31.7
None	2	2.7	15	36.5	3	2.8	33	37.1	26	63.4
Total	75	100.0	41	100.0	109	99.9	89	99.9	41	100.0
No Answer	0		34		40		60		108	
Total	75		75		149		149		149	

Source: S & C.

TABLE 19

Visual Aid Inventory: Opaque and Overhead Projectors

Number of machines	Schools				Classes					
	Number owned or on long-term loan		Estimated additional number desired		Number now owned or on long-term loan		Number assigned to classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	0	0.0	1	2.6	3	3.3	0	0.0	0	0.0
8	1	1.6	0	0.0	0	0.0	0	0.0	0	0.0
7	0	0.0	1	2.6	0	0.0	0	0.0	0	0.0
6	2	3.1	4	10.3	1	1.1	1	1.6	0	0.0
5	3	4.7	2	5.1	1	1.1	0	0.0	0	0.0
4	3	4.7	0	0.0	2	2.2	0	0.0	0	0.0
3	8	12.5	3	7.7	5	5.5	2	3.2	0	0.0
2	18	28.1	9	23.1	24	26.4	7	11.1	2	5.0
1	26	40.6	10	25.5	44	48.3	22	34.9	21	51.2
None	3	4.7	9	23.1	11	12.1	31	49.2	18	43.8
Total	64	100.0	39	100.0	91	100.0	63	100.0	41	100.0
No answer	11		36		58		86		108	
Total	75		75		149		149		149	

Source: S & C.

TABLE 20

Visual Aid Inventory: Tachistoscopes

Number of machines	Schools				Classes					
	Number owned or on long-term loan		Estimated additional number desired		Number now owned or on long-term loan		Number assigned to classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0
8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	0	0.0	0	0.0	2	3.8	2	5.4	0	0.0
2	5	11.1	2	6.7	1	1.9	0	0.0	0	0.0
1	18	40.0	12	40.0	17	32.7	9	24.3	12	52.2
None	22	48.9	16	53.3	31	59.6	26	70.3	11	47.8
Total	45	100.0	30	100.0	52	99.9	37	100.0	23	100.0
No answer	30		45		97		112		126	
Total	75		75		149		149		149	

Source: S & C.

TABLE 21

Visual Aid Inventory: Filmstrip Projectors

Number of machines	Schools: Number owned or on long-term loan		Schools: Estimated additional number desired		Classes: Number now owned or on long-term loan		Classes: Number assigned to classes for deaf		Classes: Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	4	5.6	0	0.0	9	8.3	2	2.0	0	0.0
8	3	4.2	0	0.0	0	0.0	0	0.0	0	0.0
7	0	0.0	1	3.0	1	0.9	0	0.0	0	0.0
6	4	5.6	1	3.0	4	3.7	2	2.0	0	0.0
5	4	5.6	1	3.0	2	1.9	0	0.0	0	0.0
4	7	9.9	1	3.0	13	12.0	4	4.1	2	4.2
3	10	14.1	5	15.2	16	14.8	6	6.1	0	0.0
2	16	22.5	4	12.1	27	25.0	8	8.2	4	8.5
1	17	23.9	6	18.2	34	31.5	45	45.9	15	31.9
None	6	8.4	14	42.5	2	1.9	31	31.6	26	55.3
Total	71	99.8	33	100.0	108	100.0	98	99.5	47	99.9
No answer	4		42		41		51		102	
Total	75		75		149		149		149	

Source: S & C.

Table 22

Visual Aid Inventory: Bioscopes

Number of machines	Schools				Classes					
	Number owned or on long-term loan		Estimated additional number desired		Number now owned or on long-term loan		Number assigned to classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct	No.	Pct.
9	0	0.0	0	0.0	5	9.6	2	6.3	0	0.0
8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	0	0.0	0	0.0	2	3.8	0	0.0	0	0.0
2	2	4.7	1	3.7	1	1.9	0	0.0	0	0.0
1	20	46.5	4	14.8	17	32.7	4	12.5	4	17.4
None	21	48.8	22	81.5	27	51.9	26	81.3	19	82.6
Total	43	100.0	27	100.0	52	99.9	32	100.1	23	100.0
No answer	32		48		97		117		126	
Total	75		75		149		149		149	

Source: SAC

TABLE 23

Visual Aid Inventory: Teaching Machines

Number of machines	Schools: Number owned or on long-term loan		Schools: Estimated additional number desired		Classes: Number now owned or on long-term loan		Classes: Number assigned to classes for deaf		Classes: Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	0	0.0	1	4.0	0	0.0	0	0.0	1	5.0
8	0	0.0	1	4.0	0	0.0	0	0.0	0	0.0
7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	0	0.0	0	0.0	0	0.0	0	0.0	1	5.0
5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	0	0.0	0	0.0	1	2.5	1	3.4	0	0.0
3	1	2.5	1	4.0	1	2.5	0	0.0	0	0.0
2	2	5.0	1	4.0	1	2.5	1	3.4	0	0.0
1	6	15.0	5	20.0	4	10.0	4	13.8	4	20.0
None	31	77.5	16	64.0	33	82.5	23	79.3	14	70.0
Total	40	100.0	25	100.0	40	100.0	29	99.9	20	100.0
No answer	35		50		109		120		129	
Total	75		75		149		149		149	

Source: BSC.

Table 24

Visual Aid Inventory: Slide Projectors

Number of machines	Schools				Classes					
	Number owned or on long-term loan		Estimated additional number desired		Number now owned or on long-term loan		Number assigned to classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	4	6.1	17	50.0	11	12.8	28	37.8	15	45.5
1	18	27.3	11	32.4	41	47.6	34	45.9	16	48.5
2	18	27.3	2	5.9	18	20.9	6	8.1	1	3.0
3	9	13.6	2	5.9	6	7.0	2	2.7	0	0.0
4	8	12.1	0	0.0	7	8.1	2	2.7	1	3.0
5	2	3.0	1	2.9	0	0.0	0	0.0	0	0.0
6	3	4.5	0	0.0	1	1.2	1	1.4	0	0.0
7	0	0.0	1	2.9	1	1.2	0	0.0	0	0.0
8	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0
9	3	4.5	0	0.0	1	1.2	1	1.4	0	0.0
Total *	66	99.9	** 34	100.0	86 *	100.0	74 **	100.0	33 ***	100.0

* 9 schools did not provide this information.
** 41 schools did not provide this information.
* 63 classes did not provide this information.
** 75 classes did not provide this information.
*** 116 classes did not provide this information.

Source: S

Table 25

Visual Aid Inventory: Television Receivers

Number of machines	Schools				Classes					
	Number owned or on long-term loan		Estimated additional number desired		Number now owned or on long-term loan		Number assigned to classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	1	1.8	1	3.1	3	4.0	1	1.7	0	0.0
8	0	0.0	1	3.1	2	2.6	1	1.7	0	0.0
7	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0
6	0	0.0	0	0.0	1	1.3	1	1.7	0	0.0
5	0	0.0	1	3.1	3	3.8	0	0.0	0	0.0
4	1	1.8	2	6.3	7	9.1	3	5.1	0	0.0
3	3	5.5	1	3.1	6	7.8	1	1.7	0	0.0
2	8	14.5	6	18.8	8	10.4	4	6.8	0	0.0
1	15	27.3	5	15.6	30	39.0	21	35.6	11	39.3
None	26	47.3	15	46.9	17	22.1	27	45.8	17	60.7
Total	55	100.0	32	100.0	77	100.1	59	100.1	28	100.0
No answer	20		43		72		90		121	
Total	75		75		149		149		149	

Source: S&C.

TABLE 26

Use of Television by Schools and Classes during Regular School Day

	Schools		Classes	
	Number	Percent	Number	Percent
Broadcasts of local and national interest	44	86.2	38	50.0
Regular supplement to courses	5	9.8	17	22.4
Complete courses, science, language arts, etc.	2	3.9	21	27.6
Total*	51	99.9	76	100.0

* 4 schools and 1 class having television did not provide this information.

Source: S & C.

Table 27

Visual Aid Inventory: Motion Picture Cameras

Number of machines	Schools				Classes					
	Number owned or on long-term loan		Estimated additional number desired		Number now owned or on long-term loan		Number assigned to classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0
8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	1	2.1	0	0.0	0	0.0	0	0.0	0	0.0
3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	3	6.2	1	3.0	2	4.0	1	2.9	0	0.0
1	22	45.8	15	45.5	16	32.0	9	26.5	7	33.3
None	22	45.8	17	51.5	31	62.0	24	70.6	14	66.7
Total	48	99.9	33	100.0	50	100.0	34	100.0	21	100.0
No answer	27		42		99		115		128	
Total	75		75		149		149		149	

Source: S&C.

Table 28

Visual Aid Inventory: Still Cameras

Number of machines	Schools				Classes					
	Number owned or on long-term loan		Estimated additional number desired		Number now owned or on long-term loan		Number assigned to classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
9	0	0.0	0	0.0	1	1.7	0	0.0	0	0.0
8	1	1.7	0	0.0	0	0.0	0	0.0	0	0.0
7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	2	3.3	1	3.0	0	0.0	0	0.0	1	3.8
5	0	0.0	0	0.0	1	1.7	1	2.0	0	0.0
4	2	3.3	0	0.0	3	5.0	2	3.9	0	0.0
3	7	11.7	0	0.0	1	1.7	0	0.0	0	0.0
2	14	23.3	1	3.0	5	8.3	5	9.8	3	11.5
1	27	45.0	12	36.4	27	45.0	24	47.1	12	46.2
None	7	11.7	19	57.6	22	36.7	19	37.3	10	38.5
Total	60	100.0	33	100.0	60	100.1	51	100.1	26	100.0
No answer	15		42		89		98		123	
Total	75		75		149		149		149	

Source: SSC.

Table 29

Visual Aid Inventory: Slides

Number of Slides	Schools						Classes					
	Owned or on long-term loan		Rented		Additional number desired		Owned or on long-term loan		Used by classes for deaf		Additional number desired for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	15	26.3	28	100.0	9	39.1	17	43.6	13	44.8	7	53.8
1- 50	7	12.3	0	0.0	1	4.3	4	10.3	5	17.2	3	23.1
51- 100	12	21.0	0	0.0	3	13.0	6	15.4	4	13.8	2	15.4
101- 200 1/	-	-	-	-	-	-	7	17.9	4	13.8	0	0.0
101- 250 2/	11	19.3	0	0.0	3	13.0	-	--	-	--	-	-
201- 300 1/	-	--	-	--	-	--	2	5.1	2	6.9	0	0.0
251- 500 2/	6	10.5	0	0.0	6	26.1	-	-	-	-	-	-
301- 400 1/	-	-	-	-	-	-	1	2.6	0	0.0	0	0.0
401- 500 1/	-	-	-	-	-	-	1	2.6	1	3.4	1	7.7
501-1000 2/	5	8.8	0	0.0	1	4.3	-	-	-	-	-	-
501 & over 1/	-	-	-	-	-	-	1	2.6	0	0.0	0	0.0
1001-2500 2/	1	1.8	0	0.0	0	0.0	-	-	-	-	-	-
Total	57	100.0	28	100.0	23	99.8	39	100.1	29	99.9	13	100.0
No answer	18		47		52		110		120		136	
Total	75		75		75		149		149		149	

1/ Applies to classes only
2/ Applies to schools only

Source: S&C.

Table 30

Visual Aid Inventory: Filmstrips

Number of Filmstrips	Schools						Classes					
	Owned or on long-term loan		Rented		Additional number desired		Owned or on long-term loan		Used by classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	3	4.6	22	84.6	1	4.2	3	4.8	6	12.2	6	30.0
1- 50	13	20.0	3	11.5	3	12.5	19	30.2	25	51.0	8	40.0
51- 100	6	9.2	0	0.0	6	25.0	6	9.5	6	12.2	3	15.0
101- 200	10	15.4	1	3.8	4	16.7	8	12.7	4	8.2	3	15.0
201- 300	10	15.4	0	0.0	3	12.5	4	6.3	1	2.0	0	0.0
301- 400	4	6.2	0	0.0	0	0.0	8	12.7	2	4.1	0	0.0
401- 500	7	10.8	0	0.0	4	16.7	4	6.3	4	8.2	0	0.0
501- 750	6	9.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
751-1000	2	3.1	0	0.0	2	8.3	2	3.2	0	0.0	0	0.0
1001 & over	4	6.2	0	0.0	1	4.2	9	14.3	1	2.0	0	0.0
Total	65	100.1	26	99.9	24	100.1	63	100.0	49	99.9	20	100.0
No answer	10		49		51		86		100		129	
Total	75		75		75		149		149		149	

Source: S&C.

Table 31

Visual Aid Inventory: Films (Silent and Sound)

Number of Films	Schools						Classes					
	Owned or on long-term loan		Rented		Additional number desired		Owned or on long-term loan		Used by classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	32	60.4	13	34.2	16	76.2	22	41.5	13	43.3	12	60.0
1- 50	17	32.1	18	47.4	4	19.0	11	20.8	11	36.7	7	35.0
51- 100	0	0.0	7	18.4	1	4.8	2	3.8	2	6.7	1	5.0
101- 200	3	5.7	0	0.0	0	0.0	3	5.7	2	6.7	0	0.0
201- 300	0	0.0	0	0.0	0	0.0	2	3.8	1	3.3	0	0.0
301- 400	0	0.0	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0
401- 500	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
501- 750	0	0.0	0	0.0	0	0.0	2	3.8	0	0.0	0	0.0
751- 1000	0	0.0	0	0.0	0	0.0	3	5.7	1	3.3	0	0.0
1000 & over	1	1.9	0	0.0	0	0.0	7	13.2	0	0.0	0	0.0
Total	53	100.1	38	100.0	21	100.0	53	100.2	30	100.0	20	100.0
No answer	22		37		54		96		119		129	
Total	75		75		75		149		149		149	

Source: S&C.

Table 32

Visual Aid Inventory: Captioned Films

Number of Captioned Films	Schools						Classes					
	Owned or on long-term loan		Rented		Additional number desired		Owned or on long-term loan		Used by classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	39	88.6	12	35.3	8	44.4	41	93.2	22	88.0	11	68.7
1-19	2	4.5	20	58.8	4	22.2	0	0.0	0	0.0	4	25.0
20-29	0	0.0	0	0.0	2	11.1	2	4.5	2	8.0	0	0.0
30-39	1	2.3	2	5.9	1	5.6	0	0.0	0	0.0	1	6.3
40-49	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
50-59	0	0.0	0	0.0	2	11.1	0	0.0	1	4.0	0	0.0
60-69	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
70-79	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
80-89	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90 and over	1	2.3	0	0.0	1	5.6	1	2.3	0	0.0	0	0.0
Total	44	100.0	34	100.0	18	100.0	44	100.0	25	100.0	16	100.0
No answer	31		41		57		105		124		133	
Total	75		75		75		149		149		149	

Source: S&C.

TABLE 33

Schools and Classes Using Filmed Courses

	Schools		Classes	
	Number	Percent	Number	Percent
Do not use filmed courses	64	86.5	107	87.0
Use parts of filmed courses	9	12.2	14	11.4
Use complete courses	1	1.4	2	1.6
Total*	74	100.1	123	100.0

* 1 school and 26 classes did not provide this information.

Source: S & C.

TABLE 34

Two-Year Plans for Filmed Courses by Schools and Classes

	Schools		Classes	
	Number	Percent	Number	Percent
No plan to use them	51	82.2	83	73.4
Plan to use them	11	17.7	26	23.0
Other	0	0.0	4	3.5
Total*	62	99.9	113	99.9

* 13 schools and 36 classes did not provide this information.

Source: S & C.

Table 35

Visual Aid Inventory: Globes

Number of Globes	Schools						Classes					
	Owned or on long-term loan		Rented		Additional number desired		Owned or on long-term loan		Used by classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	2	3.0	25	100.0	6	20.0	5	7.6	8	11.6	20	62.5
1- 5	30	44.8	0	0.0	13	43.3	37	56.1	56	81.2	12	37.5
6-10	16	23.9	0	0.0	5	16.7	9	13.6	4	5.8	0	0.0
11-20	13	19.4	0	0.0	5	16.7	6	9.1	1	1.4	0	0.0
21-30	4	6.0	0	0.0	1	3.3	6	9.1	0	0.0	0	0.0
31-50	1	1.5	0	0.0	0	0.0	2	3.0	0	0.0	0	0.0
51-60	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
60-over	0	0.0	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0
Total	67	100.1	25	100.0	30	100.0	66	100.0	69	100.0	32	100.0
No answer	8		50		45		83		80		117	
Total	75		75		75		149		149		149	

Source: S&C.

Table 36

Visual Aid Inventory: Permanent Charts

Number of charts	Schools						Classes					
	Owned or on long-term loan		Rented		Additional number desired		Owned or on long-term loan		Used by classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	3	5.0	25	100.0	4	19.0	10	19.6	14	31.1	9	37.5
1- 25	27	48.3	0	0.0	9	42.8	31	60.8	27	60.0	13	54.2
26- 50	9	15.0	0	0.0	2	9.5	9	17.6	4	8.9	1	4.2
51-100	9	15.0	0	0.0	5	23.8	1	2.0	0	0.0	1	4.2
101-200	6	10.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
201-300	2	3.3	0	0.0	1	4.8	0	0.0	0	0.0	0	0.0
301-400	1	1.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
401 & over	1	1.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	58	100.0	25	100.0	21	100.0	51	100.0	45	100.0	24	100.1
No answer	17		50		54		98		104		125	
Total	75		75		75		149		149		149	

Source: S&C.

Table 37

Visual Aid Inventory: Maps

Number of Maps	Schools						Classes					
	Owned or on long-term loan		Rented		Additional number desired		Owned or on long-term loan		Used by classes for deaf		Additional number desired for classes for deaf	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	1	1.5	25	100.0	5	20.0	6	9.5	5	8.6	13	46.4
1-19	17	26.6	0	0.0	12	48.0	31	49.2	50	86.2	14	50.0
20-29	11	17.2	0	0.0	5	20.0	6	9.5	2	3.4	1	3.6
30-39	8	12.5	0	0.0	0	0.0	6	9.5	1	1.7	0	0.0
40-49	5	7.8	0	0.0	0	0.0	2	3.2	0	0.0	0	0.0
50-59	7	10.9	0	0.0	1	4.0	2	3.2	0	0.0	0	0.0
60-69	2	3.1	0	0.0	0	0.0	1	1.6	0	0.0	0	0.0
70-79	3	4.7	0	0.0	1	4.0	1	1.6	0	0.0	0	0.0
80-89	1	1.6	0	0.0	0	0.0	1	1.6	0	0.0	0	0.0
90 & over	9	14.1	0	0.0	1	4.0	7	11.1	0	0.0	0	0.0
Total	64	100.0	25	100.0	25	100.0	63	100.0	58	99.9	28	100.0
No answer	11		50		50		86		91		121	
Total	75		75		75		149		149		149	

Source: S&C.

TABLE 38

Visual Aid Inventory: Picture Libraries

	Yes		No		Total	No answer	Total
	Number	Percent	Number	Percent			
SCHOOLS							
Owned or on long-term loan	48	80.0	12	20.0	60	15	75
Rented	1	3.7	26	96.3	27	48	75
Additions desired	11	50.0	11	50.0	22	53	75
CLASSES							
Owned or on long-term loan	59	81.9	13	18.1	72	77	149
Used by classes for deaf	51	81.0	12	19.0	63	86	149
Additions desired	13	48.1	14	51.8	27	122	149

Source: S & C.

Table 39

Frequency with Which Sources of Films and Filmstrips are Used by Schools and Classes

	Frequency of use						Total		No answer
	Never used		Very seldom		Frequently				
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.
SCHOOLS									
State Department of Education	16	24.6	30	46.1	19	29.2	65	99.9	10
Regional or County Film Coop	37	66.0	10	17.9	9	16.1	56	100.0	19
City or County Public Library	27	45.0	18	30.0	15	25.0	60	100.0	15
University Film Library	19	31.1	25	41.0	17	27.9	61	100.0	14
Commercial Sales or Rental Agency	8	11.6	26	37.7	35	50.7	69	100.0	6
Business and Trade Associations (free films)	8	11.9	20	29.8	39	58.2	67	99.9	8
Religious and other non-profit agencies	19	31.7	32	53.3	9	15.0	60	100.0	15
U. S. Government (except captioned films)	25	41.7	23	38.3	12	20.0	60	100.0	15
Captioned Films	9	13.4	10	14.9	48	71.6	67	99.9	8
Your own school system	23	46.0	4	8.0	23	46.0	50	100.0	25
CLASSES									
State Department of Education	34	38.6	33	37.5	21	23.9	88	100.0	61
Regional or County Film Coop	35	41.2	24	28.2	26	30.6	85	100.0	64
City or County Public Library	22	24.2	33	36.3	36	39.6	91	100.1	53
University Film Library	26	26.8	41	42.2	30	30.9	97	99.9	52
Commercial Sales or Rental Agency	21	23.1	49	53.9	21	23.1	91	100.1	58
Business and Trade Associations (free films)	13	13.7	51	53.7	31	32.6	95	100.0	54
Religious and other non-profit agencies	40	51.9	34	44.1	3	3.9	77	99.9	72
U. S. Government (except captioned films)	31	40.8	41	53.9	4	5.3	76	100.0	73
Captioned Films	33	42.8	32	41.5	12	15.6	77	99.9	72
Your own school system	9	7.6	5	4.2	104	88.1	118	99.9	31

Source: S&C.

TABLE 40

Schools and Classes for the Deaf

Using County and Regional Film Cooperative

	Schools		Classes	
	Number	Percent	Number	Percent
Schools not belonging to film cooperative	65	89.0	94	73.4
Schools belonging to film cooperative	8	11.0	34	26.6
Total*	73	100.0	128	100.0

* 2 schools and 21 classes did not provide this information.

Source: S & C.

TABLE 41

Facilities for Producing Visual Aid Materials in Schools and Classes

Number of facilities	Schools Number	Schools Percent	Classes Number	Classes Percent
No facilities	33	46.5	90	61.6
1 facility	19	26.8	27	18.5
2 facilities	10	14.1	15	10.3
3 facilities	8	11.3	13	8.9
4 facilities	1	1.4	1	0.7
Total*	71	100.1	146	100.0

* 4 schools and 3 classes did not provide this information.

Source: S & C.

TABLE 42

Areas in Which Schools and Classes for the Deaf Have Developed Visual Aids

	Schools		Classes	
	Number	Percent	Number	Percent
None developed	39	57.3	89	65.4
Areas developed:				
More than one area	18	26.5	24	17.6
Preschool subjects, elementary school subjects	7	10.3	4	2.9
Reading, vocabulary development	2	2.9	3	2.2
History and social studies, area studies, religion	1	1.5	1	0.7
Math, science, arithmetic	1	1.5	1	0.7
Language development	0	0.0	10	7.4
Speechreading, lipreading	0	0.0	1	0.7
Auditory training	0	0.0	2	1.5
Other areas	0	0.0	1	0.7
Total*	68	100.0	136	99.8

---

* 7 schools and 13 classes did not provide this information.

Source: S & C.

TABLE 43

Nature of Visual Aid Materials Produced by Schools and Classes

	Schools		Classes	
	Number	Percent	Number	Percent
None developed	39	59.1	89	65.9
Type of visual aids developed:				
More than one visual aid developed	15	22.7	12	8.9
Photographs, pictures, flash cards, charts	7	10.6	21	15.6
Slides	4	6.1	10	7.4
Movies	0	0.0	1	0.7
Filmstrips	1	1.5	1	0.7
Programs for teaching machines	0	0.0	1	0.7
Total*	66	100.0	135	99.9

* 9 schools and 14 classes did not provide this information.

Source: S & C.

TABLE 44

Schools and Classes Willingness to Share Visual Aid Materials They Produce

	Schools		Classes	
	Number	Percent	Number	Percent
None developed	39	59.1	89	72.9
Willing to share	16	24.2	19	15.6
Unwilling to share	11	16.7	14	11.5
Total*	66	100.0	122	100.0

* 9 schools and 27 classes did not provide this information.

Source: S & C.

TABLE 45

Schools and Classes Plans to Produce Visual Aid Materials in Next One or Two Years

	Schools		Classes	
	Number	Percent	Number	Percent
None planned	41	61.2	71	68.3
Area planned:				
More than one category	13	19.4	9	8.7
Preschool, primary level, Sunday School	5	7.5	4	3.8
Language, vocabulary, speech-reading, speech correction, lipreading	3	4.5	16	15.4
Mathematics & science, arithmetic	1	1.5	0	0.0
Auditory training	0	0.0	0	0.0
History and other social studies	0	0.0	0	0.0
Vocational subjects, driver training	0	0.0	0	0.0
Life adjustment	0	0.0	0	0.0
Other or non-specified	4	6.0	1	1.0
Total*	67	100.1	104	100.1

* 8 schools and 45 classes did not provide this information.

Source: S & C.

Table 46

Schools and Classes Willingness to Share Visual Aid Materials They Plan to Produce

	Schools		Classes	
	Number	Percent	Number	Percent
None planned	41	63.1	71	75.5
Willing to share	18	27.7	19	20.2
Unwilling to share	6	9.2	4	4.3
Total*	65	100.0	94	100.0

*10 schools and 55 classes did not provide this information

Source: S&C.

Table 47

Schools with Plans for Developing Own Visual Aids

Area	Number
Slides	11
Movies	7
Materials for overhead and opaque projector	5
Filmstrips	4
Flat pictures	2
Present program shall be expanded	2
Various items as needed	2
Already developing some	2
None designated	2
Flip charts	1
Programmed learning material	1
Total	39

Schools having no Plan for Developing Visual Aid Materials

Reason	Number
Do not have plans, no reason given	32
No faculty member capable of carrying out program	2
No funds available	1
Needs adequately met	1
No time for this	1
Total	37

Source: A.

TABLE 48

Inservice Visual Aid Instruction in Schools and Classes

	Frequency		Schools		Classes	
Person(s) conducting classes	Schools	Classes	Number	Percent	Number	Percent
Do not have inservice instruction			32	43.8	54	38.8
Do have instruction:			41	56.2	85	61.2
Principal, Supervisor, Assistant Principal, Director	15	18				
A faculty member who has "know how"	6	8				
Visual aid specialist (inside school)	4	21				
Supervisory teacher	4	3				
No special instructor	4	5				
Visual aid specialist (outside school)	3	21				
Science instructor	2	1				
Librarian	2	0				
Company selling equipment	1	3				
Other person	0	5				
Total*			73	100.0	139	100.0

---

* 2 schools and 10 classes did not provide this information.

Source: S & C.

Table 49

Organization of Inservice Training Program for Visual Aids in Schools and Classes

Type of program	Schools Number	Schools Percent	Classes Number	Classes Percent
No inservice instruction	32	43.8	48	37.5
Informal program, attendance not required	25	34.2	51	39.8
Formal program, attendance required	16	21.9	29	22.7
Total*	73	99.9	128	100.0

* 2 schools and 21 classes did not provide this information

Source: S&C.

Table 50

Hours of Inservice Visual Aid Instruction in Schools and Classes

	Schools		Classes	
	Number	Percent	Number	Percent
No inservice instruction	32	46.4	48	42.9
No specification mentioned (as need arises)	29	42.0	41	36.6
Definite number of hours set	8	11.6	23	20.5
Total*	69	100.0	112	100.0

* 6 schools and 37 classes did not provide this information

Source: S&C

TABLE 51

Reasons Given by Administrators Why a Course in Visual Aids Should or Should Not Be Required of All Teachers of the Deaf

		Number
Favor requirement		53
Reasons		
Enables teachers to get the most out of visual aids	19	
Improves the teacher and her ability to teach	9	
Takes advantage of the deaf student being "visually minded"	6	
Offers teachers a different avenue of approach	5	
Makes teachers aware of visual aids	3	
Answer is obvious	2	
Disciplinary reasons	1	
Makes teacher able to coordinate material with subject	1	
A short course is desirable	1	
Should be required, but did not give a reason	6	
Opposed to requirement		7
Reasons		
In service training sufficient	2	
Personal observation and salesman's demonstration sufficient	2	
It is of insignificant value	2	
Coordinator can handle this training	1	
Undecided		3
Total **		63

** 1 supervisor did not answer.

Source: A.

TABLE 52

Visual Aid Administration in Schools and Classes

	Schools		Classes	
	Number	Percent	Number	Percent
Someone responsible for visual aid program	47	62.6	99	66.4
No one responsible for visual aid program	28	37.4	50	33.6
Total	75	100.0	149	100.0

Source: S & C.

TABLE 53

Methods of Coordinating Visual Aid Programs in Schools

	Number
Visual Aid Coordinator	13
Each teacher is responsible	9
Principal coordinates	8
Principal and Teacher	7
Supervising Teacher	5
Faculty Committee	5
Principal and Supervising Teacher	2
Principal and Visual Aid Coordinator	2
Principal, Visual Aid Coordinator, Teachers	2
Visual Aid Coordinator and Teachers	1
Principal, Supervising Teacher, Visual Aid Coordinator	1
Assistant Principal and Supervising Teacher	1
Principal, Teachers, Superintendent	1
Supervising Teacher and Teachers	1
Assistant Principals	1
Public School System	1
No program	4
Total	64

Source: A.

TABLE 54

Importance of a Visual Aid Coordinator in the Schools

		Number
Very important		19
Reasons:		
Would enable schools to use visual aids more efficiently	13	
Would keep staff informed of new advancements	2	
Would free the principal for administrative duties	2	
Would help promote all-over harmony in school program	1	
Very important, but no reason given	1	
Important, but not necessary		16
Reasons:		
School is too small to justify a full time visual aid coordinator	4	
No reason given	4	
Satisfied with present program	2	
Frees principal for other duties	2	
Other administrators can handle this job	1	
There is an existing shortage of trained teachers	1	
Would make for a more effective teaching program	1	
Field of visual aids is still too new	1	
Not important		9
Reasons:		
School too small	5	
Supervising teacher closer to class than a visual aid coordinator	2	
Present program satisfactory	1	
Have other more pressing needs	1	
Total *		44

* 20 superintendents did not provide this information.

Source: A.

Table 55

Suggested Functions for a Visual Aid Coordinator

Function	Frequency of Times Mentioned
Keep teacher up to date on VA developments	12
Evaluate and select VA material	12
Suggest new uses of available material	11
Suggest visual material for classroom use	11
Prepare specialized material	10
Order and schedule equipment and material	9
Train teachers to operate equipment	8
Repair and maintain equipment	8
Classify and store materials	8

Source: A.

Table 56

Persons Primarily Responsible for Various Visual Aid Activities in the Schools.

ACTIVITY	A	B	C	D	E	G	H	NONE	More than one*	Super. Teacher	Contract	Repairman	Library	Total
Suggesting appropriate visual aids for classes	5 (8.8)	3 (5.3)	10 (17.5)	3 (5.3)	0 (0.0)	1 (1.8)		2 (3.5)	32 (56.1)	1 (1.8)				57
Training teachers	9 (15.8)	2 (3.5)	2 (3.5)	11 (19.3)	0 (0.0)	3 (5.3)	1 (1.8)	2 (3.5)	19 (33.3)	3 (5.3)	2 (3.5)			57
Suggesting new materials	7 (12.3)	0 (0.0)	2 (3.5)	12 (21.0)	1 (1.8)	2 (3.5)		2 (3.5)	26 (45.6)	5 (8.8)				57
Keeping teacher up-to-date	10 (17.5)	1 (1.8)	2 (3.5)	12 (21.0)	0 (0.0)	1 (1.8)		2 (3.5)	26 (45.6)	3 (5.3)				57
Ordering material and equipment	8 (8.8)	2 (3.5)	3 (5.3)	17 (29.8)	1 (1.8)	1 (1.8)		1 (1.8)	21 (36.8)	3 (5.3)				57
Repairing and maintaining	10 (17.5)	2 (3.5)	1 (1.8)	18 (31.6)	1 (1.8)		1 (1.8)	2 (3.5)	7 (12.3)	8 (14.0)	2 (3.5)	5 (8.8)		57
Classifying and storing	12 (21.0)	5 (8.8)	3 (5.3)	8 (14.0)		1 (1.8)		2 (3.5)	10 (17.5)	10 (17.5)			6 (10.5)	57
Preparing specialized materials	6 (10.5)	1 (1.8)	19 (33.3)	4 (7.0)		6 (10.5)	3 (5.3)	3 (5.3)	15 (26.3)					57
Evaluating and selecting	4 (7.0)	4 (7.0)	2 (3.5)	6 (10.5)		1 (1.8)	1 (1.8)	2 (3.5)	35 (61.4)	2 (3.5)				57

Code

A - Visual Aid Coordinator
B - Faculty Committee
C - Each teacher responsible
D - Principal
E - Superintendent
G - No one responsible
H - Activity does not apply to our school

* See Table 56B for breakdown of this category.

Source: - A

Table 56B

Activity	D and F**	D and C	B and D	D and E	C D F**	C D E	B C D	F** B D	A and F*	A and D	A C F*	D E F**	C D E F**	A and B	A B C D	B D E	B and C	C and F*	D and G
Suggesting material	3	5	2	1		2	2		2	6	1		1	3	1		1	2	
Training teachers to operate	8	1	1	1						8					1				
Suggesting new material	6	2	4			1			2	8			1	1				1	
Keeping teachers up-to-date	6	2	3	2	2	1			1	6	1			1	1				
Ordering materials and scheduling	7		2	2	2	1				7									
Repairing and maintaining equipment	1	1	1	2					2										
Classifying and storing	2	2	3						2					1					
Preparing specialized materials	1	2	2	1	1				1		3		1	1	1		1		
Evaluation and selection	1	7	3		2	1	3	1	1	1	4	1		3	3	1	1	3	1

* Asst. Principal
** Sup. teacher

Scurce: - A

TABLE 57

Persons Responsible for Making Visual Aid Decisions in Schools

Persons	Purchase of equipment	Purchase of materials	Scheduling of equipment & materials
Superintendent	19	15	1
Principal	16	21	29
Teachers	3	2	1
Director	3	3	1
Visual Aid Coordinator	4	4	14
Supervising Teacher	1	1	11
Supervising Teacher and Teachers	1	1	1
Principal and Visual Aid Coordinator	1	1	
Director of Instructional Material	1	1	1
Assistant Superintendent		1	1
More than one	14	14	3
Total *	63	63	63

* 1 superintendent did not provide this information.

Source: A.

Table 58

Means of Informing Teachers of New Visual Aid Equipment and Materials in Schools and Classes

	Schools		Classes	
	Number	Percent	Number	Percent
Have a systematic program (one or more items checked except no systematic program)	68	90.7	125	86.8
No systematic program	7	9.3	17	11.8
Other undefined program or method	0	0.0	2	1.4
Total*	75	100.0	144	100.0

* 5 classes did not provide this information

Source: S&C.

Table 59

Present Procedure for Selecting Visual Aid Materials by Schools and Classes

	Schools		Classes	
Method	Number	Percent	Number	Percent
Selection is made by a committee (teacher, principals, etc.)	26	38.8	48	32.6
Individual teacher submits requests for visual aid materials	22	32.8	61	41.5
Selection is stimulated by entire supervisory personnel	12	17.9	13	8.8
Selection is stimulated by visual aid coordinator	3	4.5	10	6.8
No particular procedure	2	3.0	11	7.5
Selection is stimulated by advertisements, etc.	1	1.5		
Librarian stimulates selections	1	1.5		
Other	0	___	4	___
Total*	67	100.0	147	99.9

* 8 schools and 2 classes did not provide this information

Source: S&C.

Table 60

Place Where Files of Visual Aid Information are Kept in Schools and Classes

	Schools		Classes	
	Number	Percent	Number	Percent
Do not keep file	5	7.0	7	4.9
File kept in:				
Principal's office, Business Office	27	38.0	31	21.7
More than one item checked	15	21.1	48	33.6
School library	13	18.3	10	6.9
Supervisory teacher's office or department heads	3	4.2	5	3.5
Visual aid coordinator's office	2	2.8	20	14.0
Teacher's workroom	2	2.8	3	2.1
Visual aid room	2	2.8	2	1.4
Other location	2	2.8	8	5.6
Specific teacher, individual teacher, classroom file	0	—	9	6.3
Total*	71	99.8	143	100.0

* 4 schools and 6 classes did not provide this information

Source: S&C.

Table 61

Extent Visual Aids are Used by Schools and Classes

Degree of Use	Schools Number	Schools Percent	Classes Number	Classes Percent
Almost every class uses them	52	74.3	109	90.0
About half of the classes use them	13	18.6	6	5.0
Less than half of the classes use them	5	7.1	6	5.0
Total*	70	100.0	121	100.0

* 5 schools and 28 classes did not provide this information

Source: S&C.

TABLE 62

Response by Administrators to Checklist Regarding Comparative Use of Their Visual Aid Programs

Statement	Number	Percent
We use visual aids less than other schools	7	11.1
We use visual aids slightly less than other schools	13	20.6
We use visual aids slightly more than other schools	17	27.0
We use visual aids more than other schools	16	25.4
We are unable to make an honest comparison	10	15.9
Total *	63	100.0

* 1 superintendent did not provide this information.

Source: A.

Table 63

Administrators Responses to Statement "Some superintendents say that some teachers do not make sufficient use of visual aids materials, because they do not know how to use them."

Response	Frequency of mention	Number
Agree		45
Reason:		
Agree, but did not make any comments	28	
Teachers are not trained properly	7	
Older teachers are afraid of machines	3	
Statement is obvious	3	
Conditions could be improved by inservice training	1	
Women shy away from equipment	1	
Equipment is not readily available	1	
Need better and more supervision	1	
Disagree		16
Reason:		
Disagree, no comment	6	
No, can be improved with inservice instruction	4	
No, but teachers can teach others	2	
No, a good teacher usually uses visual aids	1	
No, but equipment is available	1	
No, teachers lack time to prepare them	1	
No, some do, but not all	1	
Total*		61

* 3 superintendents did not provide this information.

Source: A.

Table 64

Superintendents' Responses to Question, "Do you feel your teachers make sufficient use of visual aids?"

Response		**Number**	**Percent**
Yes		34	56.7
Reasons:	**Frequency**		
Some use them too much	3		
Could do better with a coordinator	2		
Use them extensively	2		
School encourages use	2		
Could be improved	1		
Those with training do	1		
Only on elementary level	1		
As much as can be expected	1		
No		26	43.3
Teachers not trained properly	5		
Answer is relative	2		
Female teachers shy away from equipment	1		
Hope to improve conditions	1		
Need more experimentation	1		
Not enough equipment available	1		
Lack time to develop program	1		
Total*		60	100.0

* 4 superintendents did not provide this information

Source: A.

Table 65

Responses by Administrators to Checklist of Problems Experienced in Using Visual Aids

Problem	Yes	No	No answer
Teachers do not have enough time to preview or prepare materials adequately	24	38	2
It is difficult for teachers to integrate visual aids into their lesson plans	20	39	5
Teachers do not have enough information to know what materials are most appropriate for their grade level	29	30	5
Many classrooms are not properly set up to use visual aids	35	28	1
Teachers do not have enough time to do all the basic teaching they should, let alone use visual aids	13	46	5
Much of the equipment is in poor repair or obsolete	1	59	4
Much of the equipment is too difficult to operate	1	59	4
Some subject areas do not have good visual aid materials	42	16	6
There is too much "red tape" involved in ordering materials and scheduling equipment	5	55	4
Students look on visual aid as "entertainment" and do not "study" material presented	13	45	6
Visual aids are too time consuming for results achieved	7	53	4

Source: A.

Table 66

Aspects Least Satisfactory in Schools' Visual Aid Programs

Aspects	Frequency of Mention
Satisfied with present program	29
Too big and complicated - need a coordinator	10
Teachers not adequately trained	7
Not enough material available	6
Visual aids are not used to fullest capacity	6
Visual aids require too much planning	2
Schools do not have enough mechanical equipment	2
Schools do not have enough space available	1
School has not visual aid program	1
Total	64

Source: A.

Table 67

Suggestions for Improving Visual Aid Programs in Schools

Suggestion	Number
Coordinator should be hired	15
Teachers need better training	10
Need financial assistance to purchase aids	5
Need new building facilities	2
Should have more teachers meetings to exchange ideas	2
A visual aid program should be established	1
Satisfied with existing visual aid program (no suggestion)	29
Total	64

Source: A.

Table 68

Administrator's Opinion on Ways Teacher Training Centers Can Help Schools with their Visual Aid Programs

Comment	Frequency
See trainees know how to operate projectors, select and evaluate materials, and have training in working with them	38
Use them in their demonstration lessons	7
Make the teachers aware of the possibilities in this field	5
Train teachers how to construct their own visual aid materials from equipment on hand	5
Teacher training programs are notoriously poor in their preparation of the student in the area of visual aids	4
Serve as a "clearing house" for visual aids developments	3
Other phases of training are more important	2
Courses in visual aids are especially important for deaf teachers of the deaf	2
Research into visual techniques, methods, etc.	2
Develop bibliography for academic areas	1
Continue California course "audio-visual"	1
Teach student teachers how to caption educational films	1
Teach trainees how to use captioned films to their best advantage	1
Train more teachers	1
Place a requirement in the certification of Training Centers which would require visual aid study by teachers in training at the 33 approved centers	1
By being a leader in the design and construction of visual aids	1
Lack of adequate visual aid training hampers school progress in this area	1
No comment	9

Source: A.

TABLE 69

Administrator's Opinion on Ways Federal Government Can Help Schools with Their Visual Aid Programs

Means	Frequency of Occurence
Expanding captioned films to include educational films and filmstrips	28
Provide equipment and funds	10
Make NDEA funds available to schools	8
Promoting research on the subject of visual aid equipment and materials for use by the deaf	6
Install a "travelling expert" to visit schools to train teachers	3
Providing filmstrips	2
Nothing - let the states do it	2
Don't know	2
Preparing brochures on techniques and uses of visual aids	2
Expand educational television	2
Provide a handbook for uncaptioned educational films	1
No response	17

Source: A.

Table 73

Future Plans for Visual Aids in Schools and Classes

	Plan to try		Continue to use		Emphasize more		No plan to try		Total		No answer
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.
Schools											
Broadcast television	7	12.5	7	12.5	10	17.9	32	57.1	56	100.0	19
Closed circuit television	4	7.6	2	3.8	0	0.0	47	88.6	53	100.0	22
Teaching machines	33	54.1	3	4.9	3	4.9	22	36.1	61	100.0	16
Programmed texts	24	46.2	7	13.5	1	1.9	20	38.5	52	100.0	23
Captioned films	10	14.5	41	59.4	14	20.3	4	5.8	69	100.0	6
Other films	2	2.9	56	80.0	10	14.3	2	2.9	70	100.1	5
Filmstrips	3	4.2	52	72.2	16	22.2	1	1.4	72	100.0	3
Slides	7	10.0	47	67.1	12	17.1	4	5.7	70	99.9	5
Overhead & opaque projectors	10	15.2	39	59.1	14	21.2	3	4.5	66	100.0	9
Classes											
Broadcast television	19	18.4	30	29.1	12	11.6	42	40.8	103	99.9	46
Closed circuit television	13	14.6	4	4.5	3	3.4	69	77.5	89	100.0	60
Teaching machines	32	34.0	6	6.4	5	5.3	51	54.2	94	99.9	55
Programmed texts	25	28.1	15	16.8	1	1.1	48	53.9	89	99.9	60
Captioned films	24	25.3	31	32.6	16	16.8	24	25.3	95	100.0	54
Other films	9	8.4	73	68.3	18	16.8	7	6.5	107	100.0	42
Filmstrips	9	6.9	92	70.8	24	18.5	5	3.8	130	100.0	19
Slides	13	11.4	76	66.1	17	14.9	8	7.1	114	100.0	35
Overhead & opaque projectors	30	27.0	47	42.4	19	17.1	15	13.5	111	100.0	38

Source: S&C.

Table 71

Future Plans for Visual Aids in Schools

Media	Plan to try		Continue present use		Emphasize use		De-emphasize use		No plan to try		Total		No answer
	No.	Pct	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.
Captioned films	8	12.7	35	55.5	16	25.4	0	0.0	4	6.3	63	99.9	1
Filmstrips	3	4.7	37	57.8	23	35.9	1	1.6	0	0.0	64	100.0	0
Overhead projector	18	30.5	6	10.2	17	28.8	0	0.0	18	30.5	59	100.0	5
Opaque projector	3	4.8	38	61.3	14	22.6	0	0.0	7	11.3	62	100.0	2
2x2 slides	4	6.6	29	47.5	9	14.8	1	1.6	18	29.5	61	100.0	3
Television program	9	15.0	18	30.0	9	15.0	0	0.0	24	40.0	60	100.0	4
Teaching machines	26	42.6	7	11.5	3	4.9	0	0.0	25	41.0	61	100.0	3

Source: A.